UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Certification of New Interstate Natural Gas Facilities *Docket No. PL18-1-000*

SUPPLEMENTAL COMMENTS OF PUBLIC INTEREST ORGANIZATIONS

The undersigned Public Interest Organizations[1] thank the Federal Energy Regulatory Commission (Commission or FERC) for opening a supplemental comment period (Supplemental NOI)[2] to evaluate its 1999 Natural Gas Certificate Policy Statement (Policy Statement), which guides the Commission's reviews of interstate gas pipeline projects.[3] Many of our organizations offered comments[4] during the Commission's initial 2018 comment window (2018 NOI).[5]

[1] The Public Interest Organizations are: (1) Natural Resources Defense Council; (2) Sustainable FERC Project; (3) 7 Directions of Service; (4) 350Brooklyn; (5) Allegheny-Blue Ridge Alliance; (6) Appalachian Mountain Advocates, Inc; (7) Appalachian Trail Conservancy; (8) Appalachian Voices; (9) Cahaba Riverkeeper; (10) Center for Biological Diversity; (11) Central Jersey Coalition Against Endless Wars; (12) Central Jersey Environmental Defenders; (13) Central Jersey Safe Energy Coalition; (14) Chesapeake Bay Foundation; (15) Chesapeake Climate Action Network; (16) Citizens for Informed Land Use; (17) Coalition Against Pilgrim Pipeline-NJ; (18) Columbia Riverkeeper; (19) Conservation Law Foundation; (20) Continental Divide Trail Coalition; (21) DivestNJ Coalition; (22) Don't Gas the Meadowlands Coalition; (23) Earthjustice; (24) Food & Water Watch; (25) Franklin JFK Democratic Club; (26) Friends of Buckingham; (27) Friends of Nelson; (28) Friends of the Earth; (29) Gas Free Seneca; (30) Healthy Gulf; (31) Lower Raritan Watershed Partnership; (32) National Parks Conservation Association; (33) Preserve Bent Mountain; (34) Preserve Monroe; (35) Preserve Montgomery County VA; (36) Property Rights and Pipeline Center; (37) Protect Our Water Heritage Rights; (38) Public Citizen; (39) Raritan Riverkeeper; (40) Richmond Interfaith Climate Justice League; (41) Rockfish Valley Investments, LLC; (42) Seneca Lake Guardian; (43) Sierra Club; (44) Skylands Group-Sierra Club, (45) Southern Environmental Law Center; (46) Virginia Citizens Consumer Council; (47) Virginia Wilderness Committee; (48) Waterkeeper Alliance; (49) Waterspirit; (50) WE ACT for Environmental Justice; (51) Western Environmental Law Center; (52) West Virginia Rivers Coalition; (53) Work for Me, DTE! Coalition; and (54) Yogaville Environmental Solutions.

[2] *Certification of New Interstate Natural Gas Pipeline Facilities,* Notice of Inquiry, 174 FERC ¶ 61,125 (2021), Docket No. PL18-1-000 (hereinafter Supplemental NOI).

[3] *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *clarified*, 90 FERC ¶ 61,128 (2000), *further clarified*, 92 FERC ¶ 61,094 (2000) (hereinafter Policy Statement).

[4] *E.g.*, "Letter to FERC from Natural Resources Defense Council, Sierra Club, Earthjustice, GreenFaith, SELC, Conservation Law Foundation, Public Citizen, Catskill Mountainkeeper, NJ Conservation Foundation, Riverkeeper, Inc. and Acadia Center," Accession No. 20180420-5241, Docket No. PL18-1-000; "Comments of the Public Interest Organizations," Accession No. 20180725-5183, Docket No. PL18-1-000 (hereinafter 2018 PIO Comments); "Comment of Food & Water Watch," Accession No. 20180725-5113, Docket No. PL18-1-000; "Supplemental Comments of 18 Public Interest Organizations," Accession No. 20181026-5143, FERC Docket No. PL18-1-000.

[5] *Certification of New Interstate Natural Gas Pipeline Facilities*, Notice of Inquiry, 163 FERC ¶ 61,042 (2018), Docket No. PL18-1-000 (hereinafter 2018 NOI).

Those comments called on the Commission to:

- Revitalize its need assessment to ensure that all relevant factors—not just precedent agreements—are considered to determine whether a proposed pipeline is needed and required by the public convenience and necessity under the Natural Gas Act (NGA);

- Utilize its broad authority to protect landowners subject to eminent domain;

- Modernize its National Environmental Policy Act (NEPA) analysis, including its consideration of project alternatives, environmental justice, and a proposed project's climate impacts; and

- Take affirmative steps to improve public participation and confidence in the certificate review process.

The Commission has since made some progress toward these goals. We appreciate the Commission working to establish the Office of Public Participation,[6] beginning to assess the significance of a project's climate impacts,[7] and instituting a policy of staying certificates during rehearing so to as avoid premature takings and environmental damage.[8] Fundamental to the Commission's continued progress is the redesign of the 22-year-old Policy Statement.

The Commission is the "guardian of the public interest" with respect to interstate gas pipeline buildout.[9] In determining whether a proposed pipeline project should be approved, the NGA requires the Commission to consider "all factors bearing on the public interest."[10] Whether a potential factor "bear[s] on the public interest" depends on its level of nexus with the agency's

[6] *See generally* Docket AD21-9-000.

[7] *N. Nat. Gas Co.*, 174 FERC ¶ 61,189, at P 29 (2021).

[8] *Limiting Authorizations to Proceed with Construction Activities Pending Rehearing*, Order 871-B, 175 FERC ¶ 61,098, at P 46 (2021).

[9] *FPC v. Transcon. Gas Pipeline Co.*, 365 U.S. 1, 7 (1961) (quoting *United States v. Detroit & Cleveland Navigation Co.*, 326 U.S. 236, 241 (1945)). The NGA provides "that the business of transporting and selling natural gas for ultimate distribution to the public is **affected with a public interest**, and that **Federal regulation** in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce **is necessary in the public interest**." 15 U.S.C. § 717(a) (emphasis added).

[10] *Atl. Refining Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 391 (1959).

core missions: namely, to encourage the "orderly development" of gas supplies[11] and "protection of the consumer."[12] For example, the D.C. Circuit has made it clear that the Commission may deny a pipeline certification due to its environmental harms.[13] The Commission's job is not to act as a clearing-house for all gas pipelines. To the contrary, it is the gatekeeper that ensures that only pipeline projects that are **required** by the public convenience and necessity are approved.[14] This limitation on approval is what ensures orderly development and consumer protection. As noted by Dr. Susan Tierney in her 2018 NOI comments, "the intention of the NGA is not to promote a plentiful supply of natural gas at any cost or in any manner, but to do so in an orderly and reasonable way."[15] Unfortunately, the Commission's application of its Policy Statement, in which it has prioritized the existence of precedent agreements (including affiliate precedent agreements) above all other factors, has facilitated disorderly development—the approval of pipeline projects that were never required to meet market demand or to serve the public interest. Many of these projects have since been cancelled, but not before the project developer seized private property or caused significant, sometimes permanent, environmental damage.[16] The time is now for the Commission to update its Policy Statement to appropriately reflect its mission.

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[11] *NAACP v. FPC*, 425 U.S. 662, 669-70 (1976) (hereinafter *NAACP*).

[12] *Cal. Gas Producers Ass'n v. FPC*, 421 F.2d 422, 428-29 (9th Cir. 1970) ("The Commission's primary duty under the Natural Gas Act is the protection of the consumer."); *see also NAACP*, 425 U.S. at 669–70; *Atl. Refining Co..*, 360 U.S. at 388 ("The purpose of the Natural Gas Act was to underwrite just and reasonable rates to the consumers of natural gas."); *FPC v. Hope Gas Co.*, 320 U.S. 591, 610 (1944).

[13] *Sierra Club v. FERC*, 867 F.3d 1357, 1373 (D.C. Cir. 2017) (hereinafter *Sabal Trail*).

[14] 15 U.S.C. § 717f(e).

[15] "Comments of Dr. Susan Tierney on the 1999 FERC Gas Policy Statement review under docket PL18-1," at 10, Accession No. 20180725-5109, Docket No. PL18-1-000 (hereinafter Tierney Comments).

[16] *E.g.*, Mike Tony, *Atlantic Coast Pipeline restoration planned to start later in WV than other states*, CHARLESTON GAZETTE-MAIL (Jan. 6, 2021), https://www.wvgazettemail.com/news/energy_and_environment/atlantic-coast-pipeline-restoration-planned-to-start-later-in-wv-than-other-states/article_232fde2b-0f9e-57f9-9919-b4453d8dce58.html; Susan Phillips, *Family that lost hundreds of trees to failed pipeline project settles with company, gets land back*, STATEIMPACT PENNSYLVANIA (July 3, 2020), https://stateimpact.npr.org/pennsylvania/2020/07/03/family-lost-hundreds-of-trees-to-failed-pipeline-project-settles-with-company-gets-land-back/.

In these supplemental comments, we offer answers to the new or modified questions posed by the Commission: A10-12; B6; C1-C11; D1; D4; and E1-E8.[17] To avoid duplication, we do not answer the questions posed in the 2018 NOI, but call on the Commission to combine these comments with our respective organizations' 2018 NOI comments, if applicable. We look forward to continuing to work with the Commission on this critically important matter.

Supplemental NOI Questions

A. Potential Adjustments to the Commission's Determination of Need

Question A10(a): Should the Commission consider adjusting its assessment of need to examine if existing infrastructure can accommodate a proposed project (beyond the system alternatives analysis examined in the Commission's environmental review)? If so, how?

ANSWER: Yes. A determination of whether existing infrastructure could meet the demand for the proposed project is a relevant factor in assessing pipeline need, and the Commission's system alternatives analysis is not currently a satisfactory proxy for this determination. The system alternatives analysis is insufficient because the Commission often describes the "purpose and need" of a proposed project (the goalpost by which every alternative is measured[18]) in terms so narrow as to eliminate existing infrastructure from consideration. This narrowing diminishes the qualitative value of the system alternatives analysis and impedes its ability to serve as a proxy for need.[19]

[17] The Supplemental NOI includes a typographical error that accidentally identified questions E4-E8 as "E3-E7." *See* Supplemental NOI at 21–22.

[18] *E.g.*, *Nat'l Parks Conservation Ass'n v. BLM*, 606 F.3d 1058, 1071 (9th Cir. 2010) (noting that an agency's "definition of the project's purpose will necessarily affect the range of alternatives considered").

[19] Were the Commission, however, to revise how it defines "purpose and need" and the range of alternatives considered as outlined in these comments, it could potentially serve as an appropriate proxy for need.

For example, in the Spire STL pipeline proceeding, Spire proposed 65 miles of new pipeline for St. Louis, Missouri.[20] It offered as its evidence of need a precedent agreement with its affiliate, Spire Missouri.[21] Spire conceded that demand in the region was flat and that Spire Missouri was simply shifting its capacity subscription from the existing Enable MRT pipeline to its corporate affiliate.[22] But the Environmental Assessment characterized the Spire STL project's "purpose and need" as "link[ing] the greater St. Louis region to a new supply of gas, which would be the only supply source to the area that does not cross the New Madrid Seismic Zone, thereby enhancing infrastructure reliability and diversity."[23] In other words, the "purpose and need" was written to automatically exclude Enable MRT from consideration. Indeed, the "no-action alternative" section concluded that "[u]nder this alternative, Spire would not provide an additional source of natural gas supply to the St. Louis market, and the purpose of the Project would not be met."[24] This also led to the Commission's summary dismissal of Enable MRT as a means to meet Spire Missouri's capacity needs, even though the pipeline already was meeting the proffered demand.[25]

[20] *Spire STL Pipeline LLC*, 164 FERC ¶ 61,085, at P 6 (2018).

[21] *Id.* at P 10. As noted in 2018, while relying on precedent agreements to justify a pipeline approval always risks approving an unneeded pipeline, this reliance is even more troubling in affiliate relationships given the inherent difference in probative value between intra-corporate and arms-length transactions. Accordingly, affiliate precedent agreements "should be afforded little weight" due to "the potential for affiliates to attempt to exercise vertical market power by establishing a justification for a new infrastructure project." Tierney Comments at 15; *see also* 2018 PIO Comments at 23–40; Miranda Wilson, *Glick on FERC cyber rules, climate and 'common decency,'* E&E (May 24, 2021), https://www.eenews.net/stories/1063733299 (quoting Chairman Glick: "We are required under statute to determine whether a pipeline is necessary or not. FERC has been completely relying on the existence of precedent agreements between shippers and pipeline developers to determine whether there's a need. In some cases, that might make sense, but it doesn't make sense when the precedent agreements are between affiliates.").

[22] *Spire STL Pipeline LLC*, 164 FERC ¶ 61,085, at P 107.

[23] "Spire STL Pipeline Project Environmental Assessment," Accession No. 20170929-3022, Docket Nos. CP17-40-000, CP17-40-001, at 2 (hereinafter Spire EA).

[24] Spire EA at 147.

[25] *Spire STL Pipeline LLC*, 169 FERC ¶ 61,134, at P 56.

The Commission's system alternatives analysis also often excludes non-gas infrastructure from consideration, despite Congress' intent that the Commission consider "the effect of construction and extensions upon the interests of producers of competing fuels and competitive transportation interests."[26] For example, in the Atlantic Coast Pipeline proceeding, the Commission defined the project's "purpose and need" as, among other things, "provid[ing] natural gas for direct, residential, commercial, and industrial uses."[27] As such, the Environmental Impact Statement only evaluated gas transportation alternatives.[28] However, when determining whether a proposed pipeline is required by the public convenience and necessity, analyzing whether the alleged demand can be met through existing pipelines[29] or other energy sources is not only highly relevant and accords with FERC's mission to approve gas projects that are required to serve the market and the public interest, but also comports with Congress' intent when it amended the NGA in 1942 to expand which projects needed to obtain a certificate of public convenience and necessity. To ignore non-gas resources and their ability to meet underlying energy demands, like electricity generation or home heating, risks approving projects that are not needed and will be economically unviable.[30]

[26] H.R. Rep. No. 77-1290, at 3 (1941) (discussing the purpose of the amendment to the NGA that expanded the requirement to obtain a certificate of public convenience and necessity to all new gas infrastructure). The legislative history is clear that Congress intended for the Commission to consider the perspective of "the producers of competing fuels and the operators of competitive methods of transportation whose economic interests may be affected by the construction or extension of natural-gas pipe lines." *Id.* at 2. *See also* Romany Webb, *Climate Change, FERC, and Natural Gas Pipelines: The Legal Basis for Considering Greenhouse Gas Emissions Under Section 7 of the Natural Gas Act* (June 2019) at 11, 15, SABIN CENTER FOR CLIMATE CHANGE LAW, COLUMBIA LAW SCHOOL, *available at* https://ssrn.com/abstract=3402520.

[27] "Atlantic Coast Pipeline and Supply Header Project Final Environmental Impact Statement," Accession No. 20170721-4000, Docket Nos. CP15-554-000, CP15-554-001, CP15-555-000, CP15-555-001, at 1-2 (hereinafter ACP EIS).

[28] ACP EIS at 3-2–3-10.

[29] The Commission should also consider the ability of future energy sources, including renewable technologies and energy efficiency, to meet the purported increase in demand. See the answers to Questions A10(c), C1 and C5, *infra*.

[30] *See* 2018 PIO Comments at 37–39.

One way the Commission could address this problem is to modernize its NEPA reviews and stop using an improperly narrow definition of a proposed project's "purpose and need." Any agency decision must be informed by the purpose of the statutes that empowers it with authority.[31] While the Commission must consider the developer's purported objectives, that "is a far cry from mandating that those private interests define the scope of the proposed project."[32] Furthermore, the range of alternatives available for the Commission's consideration under the NGA is not limited to only those options that may be considered under NEPA. The NGA is clear: anything that renders the proposed project not required by the public convenience and necessity mandates that the Commission deny the project.[33] Put simply, if existing infrastructure—including gas infrastructure and non-gas resources such as renewables—can eliminate the need for a new pipeline, then authorization of the project violates the NGA.

Question A10(b): Should the Commission consider adjusting its assessment of need to examine if demand in a new project's markets will materialize? If so, how?

ANSWER: Yes. The Commission cannot properly determine whether a proposed project is required by the present or future public convenience and necessity without evaluating energy demand projections, particularly given that existing pipelines are underutilized[34] and one of the Policy Statement's key goals is to avoid overbuilding.[35] Ensuring that FERC orders consider

[31] *See League of Wilderness Defs. v. USFS*, 689 F.3d 1060, 1070 (9th Cir. 2012); *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991) ("an agency should always consider the views of Congress, expressed, to the extent that the agency can determine them, in the agency's statutory authorization to act, as well as in other congressional directives"); *City of New York v. U.S. Dep't of Transp*., 715 F.2d 732, 743 (2d Cir. 1983) ("Frequently, a pertinent guide for identifying an appropriate definition of an agency's objective will be the legislative grant of power underlying the proposed action.").

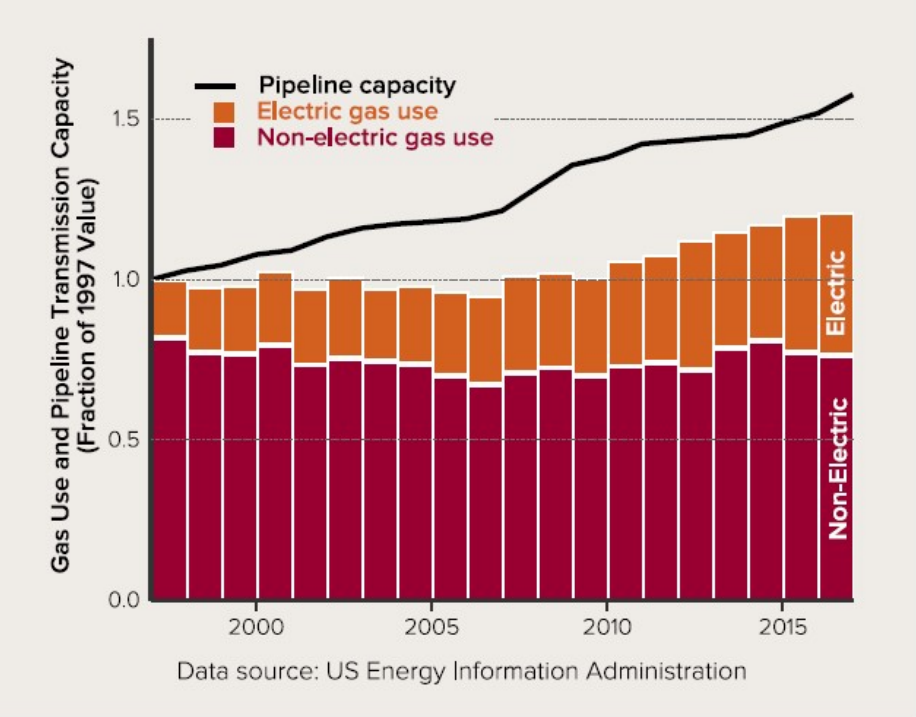
[32] *Nat'l Parks Conservation Ass'n*, 606 F.3d 1058 at 1070.

[33] 15 U.S.C. § 717f(e).

[34] *See* 2018 PIO Comments at 37 (noting that according to DOE, the average utilization rate from 1998-2013 was only 54 percent and the projected utilization rate for the top pipeline segments is only 57 percent by 2030).

[35] Policy Statement at 2.

energy demand is particularly important today, as more states impose clean energy targets and shift away from fossil resources.[36] Recent studies demonstrate that the sharp decline in the cost of renewables likely will crowd out the demand for gas-fueled electricity in the coming decades, resulting in a higher per unit cost of gas-generated electricity, as well as a high risk that those gas assets will become "stranded."[37] As highlighted by the Rocky Mountain Institute (RMI), on average, pipeline capacity over the past 20 years has grown much faster than demand:



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[36] At least eleven states and Puerto Rico have adopted or are currently considering legislation that would require the phase-out of fossil fuel generated electricity. The states include: California, Connecticut, Hawaii, Illinois, Maine, Massachusetts, New Mexico, Oregon, Rhode Island, Virginia, and Washington.

[37] *See generally* Charles Teplin et al, *The Growing Market for Clean Energy Portfolios: Economic Opportunities for a Shift from New Gas-Fired Generation to Clean Energy across the United States Electricity Industry*. RMI (2019), *available at* https://rmi.org/insight/clean-energy-portfolios-pipelines-and-plants (hereinafter *Clean Energy Portfolios*); Mark Dyson et al, *Prospects for Gas Pipelines in the Era of Clean Energy: How Clean Energy Portfolios are Reducing US Power Sector Demand for Natural Gas and Creating Stranded Asset Risks for Gas Pipelines*, RMI (2019), *available at* https://rmi.org/insight/clean-energy-portfolios-pipelines-and-plants (hereinafter *Prospects*),

[38] *Prospects* at 6.

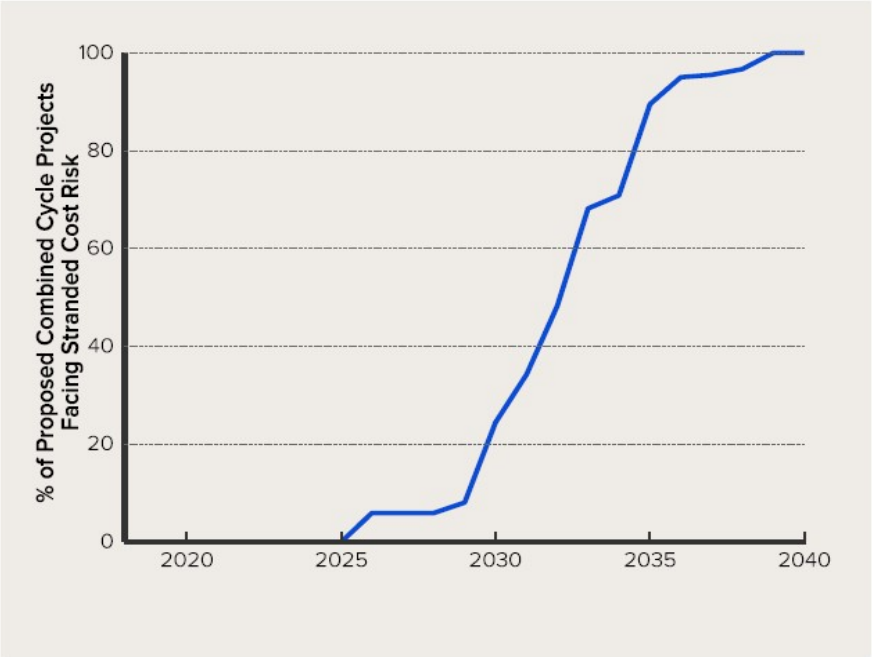
It is not surprising that the gas industry would overbuild infrastructure; for decades, it has exploited a weak pipeline permitting framework that routinely guarantees a 14 percent return on equity on those investments.[39] Building pipelines has made good business sense specifically **because** of the Commission's lax review of project need, paired with its awarding of a generous return. However, a private company's desire to make a profit cannot and must not be a proxy for determining if there is a genuine public need for a proposed pipeline.

Market indicators further suggest that the falling price of renewables will put significant pressure on gas-powered energy facilities. In a recent study covering many of the country's fastest growing electricity markets—including the New England, New York, Mid-Atlantic, Midwest, and Southeast regions—RMI found that clean energy portfolios are expected to provide electricity at less cost than over 80 percent of all proposed gas plants by 2035.[40] The benefits to both consumers and to society cannot be understated: substituting renewables for gas-powered electricity in these markets would result in a total of $16 billion in savings (over the first 20 years of a facility's operation), as well as reduce carbon emissions by 83 million tons.[41] This decrease in the cost of renewables means that gas-powered electricity will become less competitive. In fact, RMI predicts that if all proposed gas plants (as of 2019) are built, then approximately 70 percent of them could become uneconomic "stranded assets" by 2035.

[39] *See* 2018 PIO Comments at 31.

[40] *Clean Energy Portfolios* at 9 (RMI's modeling found that clean energy portfolios were lower cost than 49 of the focus regions' proposed 60 gigawatts as of 2019).

[41] *Id.* at 36.



[42]

Once built, gas facilities can operate for decades.[43] Nevertheless, the gas industry itself is recognizing the long-term instability of its projects, as shippers are demanding shorter and more flexible terms in precedent agreements. This makes precedent agreements an even less reliable indicator of future demand than before. Absent an adjustment to the Commission's need assessment, it is guaranteed that the Commission will approve unneeded pipelines.

Furthermore, as more states adopt aggressive climate goals, including mandates with respect to building decarbonization, failing to incorporate a consideration of energy demand projections risks the Commission overlooking the collapsing demand for gas not only in electricity generation but also in building use.

[42] *Id.* at 9, 38. The study determined that by 2035, 71 percent of proposed gas capacity would be more expensive to operate than energy derived from "Clean Energy Portfolios" (i.e. wind, solar, and storage). By 2045, approximately 80 percent of proposed gas facilities would be uneconomic to operate.

[43] *The Interstate Natural Gas Transmission System: Scale, Physical Complexity and Business Model* at 1, INGAA (2019), http://www.ingaa.org/file.aspx?id=10751.

To properly incorporate energy demand projections, the Commission should solicit independent (i.e., not written by the project applicant or its agents) data-based studies that relate to the specific pipeline under review.[44] For example, it could require Commission staff to submit independent studies, as is often done in merger and rate hearing cases before the Commission. It could also require the project applicant to fund an independent, third-party study of energy demand in the relevant area. Such a study should first analyze whether there is a demand for energy in the region and then analyze how that energy demand could be met, including through other gas and non-gas alternatives.

Concerns that such a system would reduce the Commission's decisionmaking to a "battle of the experts" are misplaced. First, by taking the project applicant's evidence of demand at face value, the Commission already is choosing to consider one projection over another—it just is not taking the additional step of comparing that projection to other sources. Second, the Commission regularly weighs competing evidence. **In fact, weighing evidence is at the core of the Commission's job under the NGA.** There is nothing about an energy demand projection that makes the Commission inherently less capable of analysis than in other venues.

> *Question A10(c): Should the Commission consider adjusting its assessment of need to examine if reliance on other energy sources to meet future demand for electricity generation would impact gas projects designed to supply gas-fired generators? If so, how?*

ANSWER: Yes. The Commission's core mission is to ensure the orderly development of gas supplies and to protect consumers.[45] As outlined in our answer to Question A10(a), *supra*, to

[44] *See* 2018 PIO Comments at 46–47.

[45] *NAACP*, 425 U.S. 662, 669–70 (1976); *Cal. Gas Producers Ass'n v. FPC*, 421 F.2d 422, 428–29 (9th Cir. 1970) ("The Commission's primary duty under the Natural Gas Act is the protection of the consumer."); *Atl. Refining Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 388 (1959) ("The purpose of the Natural Gas Act was to underwrite just and reasonable rates to the consumers of natural gas."); *FPC v. Hope Gas Co.*, 320 U.S. 591, 610 (1944).

approve gas infrastructure without a consideration of whether existing non-gas resources, such as solar, wind, and energy efficiency can (or will) meet the alleged underlying need (e.g., electricity generation, residential, and commercial heating) is neither orderly nor consistent with the NGA. Were the Commission to incorporate a consideration of applicable climate targets, fossil-fuel phase-out goals, and energy demand projections, the Commission would be well-positioned to determine whether other energy resources would appropriately meet future energy demand.

> *Question A11: In its determination of need, should the Commission consider the economic, energy security and social attributes of domestic production and use of natural gas as detailed in the letter dated February 11, 2021 from the Chairman of the Senate Energy and Natural Resources Committee, Senator Joe Manchin III, to President Biden?*

ANSWER: The Commission should modify its current dependence on precedent agreements such that all relevant factors are considered in determining whether a proposed pipeline is required by the public convenience and necessity. Whether a particular project would offer economic, energy security, or social benefits could be a relevant factor. However, the weight attributed to that factor should be based not on blanket assumptions of benefit but on data about the specific project that is publicly available in the FERC docket. In other words, not all projects provide equal (or any) economic, security, or social benefits, and they can also cause significant economic, security, or social costs. For too long, the Commission has made broad-sweeping assumptions about the purported inherent need for gas pipelines (i.e., its uncritical reliance on precedent agreements) without considering the specific data available for the project under review. This is despite the fact that, as noted in our answer to Question A10(b), *supra*, the gas system is already overdeveloped and underutilized. Further, to the extent that "energy security" is understood to mean "fuel security," this is a misnomer. Outages due to fuel supply

(including on military bases) are exceptionally rare[46]; in both cases, the overwhelming cause of outages are disruptions on the distribution system. Moreover, the recent Texas blackout highlights that overreliance on gas-fired power poses its own security risks.[47]

Additionally, any potential economic, social, or security benefits must be weighed against the economic, social, or security costs: specifically, the proposed project may hinder other economic, social, or security goals. For example, affected landowners may have their own plans for economic development, which could be thwarted by any pipeline proposal.[48] Negative social costs include increased pollution, public health concerns, erosion, and species loss. The U.S. Department of Defense has recognized that climate risks, which are perpetuated by the continued use of fossil fuels, are themselves a security risk.[49] Thus, to the extent the Commission incorporates economic, social, or energy security factors, it should base its analysis on discrete and objective evidence that directly links a project to its specific benefits and costs.

Question A12: In its general public interest considerations under the NGA or other federal statutes, should the Commission consider the interests of low to middle income

[46] *See generally* Trevor Houser et al, *The Real Electricity Reliability Crisis* (2017), *available at* https://rhg.com/research/the-real-electricity-reliability-crisis-doe-nopr/. Military base outages are directly linked to civilian outages as 99 percent of military-base power comes from the civilian grid. *E.g.*, Peter Pry, *Cyber and EMP Preparedness*, REALCLEAR DEFENSE (May 24, 2021), https://www.realcleardefense.com/articles/2021/05/24/cyber_and_emp_preparedness_778417.html.

[47] Erin Douglas, *Texas largely relies on natural gas for power. It wasn't ready for the extreme cold.*, TEXAS TRIBUNE (Feb. 16, 2021), https://www.texastribune.org/2021/02/16/natural-gas-power-storm/. The Colonial Pipeline cyberattack further exemplifies how overreliance on any one fuel-source can pose security threats. *See* Jeff Martin, Frank Bajak, and Norman Merchant, *Gas crunch from cyberattack intensifies in nation's capital*, ASSOCIATED PRESS (May 14, 2021), https://apnews.com/article/europe-technology-hacking-business-472c7e4f30649aec2dbf38200521b906.

[48] *See, e.g.*, Jack Money, *'A promise written in disappearing ink': Midship Pipeline issues leave landowners with environmental damage, financial loss*, THE OKLAHOMAN (May 16, 2021), https://www.oklahoman.com/story/business/energy-resource/2021/05/16/oklahoma-landowners-construction-problems-midship-pipeline-cheniere-energy/4987265001/; Rachael Smith, *Pipeline threatens plans for $35 million Nellysford resort*, NEWS & ADVANCE (July 8, 2015), https://newsadvance.com/nelson_county_times/news/pipeline-threatens-plans-for-35-million-nellysford-resort/article_3527f4aa-259d-11e5-a135-775e0a418125.html.

[49] Aaron Mehta, *Climate change is now a national security priority for the Pentagon*, DEFENSENEWS (Jan. 27, 2021), https://www.defensenews.com/pentagon/2021/01/27/climate-change-is-now-a-national-security-priority-for-the-pentagon/.

communities in which the production or transportation of natural gas is a significant source of jobs and/or tax revenues that fund public service?

ANSWER: This question rests on the false assumption that gas development inherently benefits "low to middle income" communities. As noted above, while any economic benefits resulting from the production or transportation of gas can be a relevant public interest factor, these alleged benefits must be corroborated through verifiable data for the specific project and compared against the project costs, including but not limited to, the increased pollution and other environmental effects caused by gas extraction and transportation, particularly the health effects on low and middle income communities.[50]

Gas developers have long marketed their projects as bringing economic opportunities to affected communities and furthering economic development. The reality is far more complex. As just one example, the now-defunct Atlantic Coast Pipeline repeatedly claimed in promotional materials that it would bring 17,000 jobs.[51] But that number counted each job on an annual basis, such that if someone was hired for a job that lasted six years, Atlantic Coast Pipeline counted that as six jobs created instead of one.[52] Independent audits concluded that, if built, the project would have produced no more than two dozen permanent jobs.[53]

Beyond inflated job statistics, there is also no guarantee that the jobs associated with a pipeline project would be filled by "low or middle income" individuals, or from individuals living in the communities directly affected by the project. Most jobs associated with gas pipeline

[50] *E.g.*, Brady Seals and Andee Krasner, *Health Effects from Gas Stove Pollution*, RMI (2020), https://rmi.org/insight/gas-stoves-pollution-health/.

[51] *ACP Workforce*, ATLANTIC COAST PIPELINE, https://atlanticcoastpipeline.com/construction/workforce.aspx (last accessed May 18, 2021).

[52] Sharon Kelly, *Student Reporters in West Virginia Find Atlantic Coast Pipeline Offers Only Two Dozen Permanent Jobs*, DESMOG (Mar. 1, 2019), https://www.desmog.com/2019/03/01/few-permanent-jobs-atlantic-coast-pipeline-west-virginia-pbs-student-reporting-labs/.

[53] *Id.*

projects are either temporary construction jobs or jobs that require advanced education and/or experiential skillsets that may not be available within the local population.[54] This is partially why, in 2019, a majority of surveyed gas industry employers (58 percent) reported that it was either "very difficult" or "somewhat difficult" to hire qualified employees.[55] Potential employers reported both a "lack of experience, training or technical skills" in the potential workforce and "insufficient qualifications, certifications, [or] education" as complicating factors.[56]

Additionally, while the long-term effects remain uncertain, the COVID-19 crisis could have a lasting, profound impact on jobs within the gas sector; assuming a "business as usual" estimation for gas prices, approximately 70 percent of the 107,000 oil, gas and chemical jobs lost during the pandemic are unlikely to return by the end of 2021.[57] In contrast, according to the Bureau of Labor Statistics, two of the three fastest growing jobs today remain wind-turbine technician and solar panel installer.[58] The shift to a clean energy economy, coupled with the projected sustained reduction in gas employment, casts doubt on whether short-term promises of economic benefits should be given much probative value.

It is likewise speculative whether any specific pipeline project would be a "significant source" of tax revenues. Even assuming a best-case scenario, in which the potential jobs created

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[54] BW Research et al, *Wages, Benefits, and Change: A Supplemental Report to the Annual U.S. Energy and Employment Report* (2021), at 57 (most jobs are in the construction, utility, or mining sectors), *available at* https://static1.squarespace.com/static/5a98cf80ec4eb7c5cd928c61/t/606d1178a0ee8f1a53e66206/1617760641036/Wage+Report.pdf.

[55] Energy Futures Initiative et al, *The 2019 U.S. Energy & Employment Report* at 110, NASEO, EFI, *available at* , https://tinyurl.com/4b2429t4.

[56] *Id.*

[57] Duane Dickson et al, *The Future of Work in Oil, Gas and Chemical: Opportunity in the Time of Change* (Oct. 5, 2020), https://www2.deloitte.com/us/en/insights/industry/oil-and-gas/future-of-work-oil-and-gas-chemicals.html.

[58] *Fastest Growing Occupations*, BUREAU OF LABOR AND STATISTICS. https://www.bls.gov/ooh/fastest-growing.htm (last accessed May 18, 2021).

are awarded to "low to middle income" individuals, that does not mean that the pipeline would create a permanent and "significant" positive impact on tax revenues. For one thing, construction of a pipeline is not the only means to economic development; in many instances, the existence of the pipeline changes what can be done with the affected land and may hinder alternative economic ventures and job opportunities that would have otherwise been pursued.[59] Further, in some cases, the existence of gas infrastructure can depress property values, both due to safety concerns and air pollutants.[60] This further emphasizes the need for a project-specific analysis, rather than relying on one-sided generalizations about pipelines' purported economic benefits.

In sum, while gas expansion—much like any other industrial activity—may result in some economic benefits, those job opportunities and tax revenues may not be realized by the communities that are in most need of investment. And while economic benefits may be considered under an "all relevant factors" test, those benefits must be clearly substantiated, afforded the proper weight, and balanced against the economic costs. The onus is on the project applicant to bridge the gap; it cannot simply say that the project would create "good jobs" and call it a day. Rather, it must demonstrate how the communities most in need would realize any economic benefits.

B. The Exercise of Eminent Domain and Landowner Interests

Question B6: Under the NGA, does the Commission have authority to condition a certificate holder's exercise of eminent domain? Should the Commission defer issuing a section 7 certificate until an applicant has all other authorizations needed to commence

[59] *See, e.g.*, Jack Money, *'A promise written in disappearing ink': Midship Pipeline issues leave landowners with environmental damage, financial loss*, THE OKLAHOMAN (May 16, 2021), https://www.oklahoman.com/story/business/energy-resource/2021/05/16/oklahoma-landowners-construction-problems-midship-pipeline-cheniere-energy/4987265001/; Rachael Smith, *Pipeline threatens plans for $35 million Nellysford resort*, NEWS & ADVANCE (July 8, 2015), https://newsadvance.com/nelson_county_times/news/pipeline-threatens-plans-for-35-million-nellysford-resort/article_3527f4aa-259d-11e5-a135-775e0a418125.html.

[60] Letter to Interested Parties from Sonia Wang and Spencer Phillips, Ph.D., *Review of INGAA Foundation Report, "Pipeline Impact to Property Value and Property Insurability*," KEY LOG ECONOMICS (Mar. 11, 2016), *available at* http://www.keylogeconomics.com/uploads/1/1/9/5/119575398/ingaa_reviewmemo_20160311.pdf.

construction? If so, can the Commission reconcile such inaction with section 7(e) of the NGA, which provides that the Commission shall issue a certificate to any qualified applicant upon finding that the proposed construction and operation of the project "is or will be required by the present or future public convenience and necessity"? Are there circumstances when an applicant may need a certificate of public convenience and necessity prior to receiving certain permits or authorizations, making it difficult for an applicant to obtain all other authorizations needed to commence construction prior to the Commission's issuance of a section 7 certificate?

ANSWER: Under the NGA, the Commission shall issue a certificate after finding that the proposed project is required by the present or future public convenience and necessity.[61] As part of its certificating authority, the NGA empowers the Commission "to attach to the issuance of the certificate … such reasonable terms and conditions as the public convenience and necessity may require."[62] While the intention of this provision was to allow the Commission to attach conditions to fully functioning certificates, FERC has regularly used this authority to issue so-called "conditional certificates," or certificates that are issued before the project developer has obtained all other mandatory federal permits, such as authorizations required under the Clean Water Act, Clean Air Act, and Coastal Zone Management Act. When issuing a conditional certificate, FERC makes an initial determination that a project is in the public interest before it has had a chance to weigh any evidence obtained pursuant to the other federal statute reviews.

Conditional certificates, much like the Commission's vacated tolling order procedure,[63] are treated as both final and non-final simultaneously. Implicitly recognizing the preliminary stature of a conditional certificate, the Commission will not authorize full construction pursuant to a conditional certificate.[64] But the Commission considers a conditional certificate holder to

[61] 15 U.S.C. § 717f(e).

[62] *Id.*

[63] *Allegheny Def. Project v. FERC*, 964 F.3d 1, 8 (D.C. Cir. 2020) (en banc).

[64] *E.g.*, *Jordan Cove Energy Project L.P.*, 170 FERC ¶ 61,202, p. 133, Condition 11 (2020).

hold the same condemnation rights as full certificate holders.[65] The D.C. Circuit has stated that FERC "does not have the discretion to deny a certificate holder the power of eminent domain."[66] This is because NGA Section 7(h) expressly grants certificate holders the right to obtain land or access that is "necessary" to "construct, operate, and maintain a pipeline."[67] But project reviews under other federal statutes can change a project's route. Thus, without these ancillary reviews, neither the project developer nor the Commission (nor anyone else) can know whether any parcel is actually "necessary" to "construct, operate, and maintain a pipeline."[68] The presumption that any parcel along the project route is "necessary" is preliminary—just like the Commission's initial determination that the project is in the public interest. In fact, as the Commission well knows, landowners have lost their property for projects that are cancelled due to the failure to obtain these other permits, rendering the taking completely unnecessary.[69]

Furthermore, the information obtained through these other federal permit reviews necessarily informs whether a proposed project is, in fact, required by the public convenience and necessity, as well as the determination of whether the project serves a "public purpose"—a requirement under the Fifth Amendment.[70] Thus, contrary to the assumption underlying the question—whether **inaction** can be reconciled with the NGA—in reality, the Commission's

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[65] *Compare Constitution Pipeline Co. v. A Permanent Easement for .67 Acres and Temporary Easement for 0.68 Acres in Summit, Schoharie Cty, N.Y., Tax Parcel No. 133.-5-14*, 2015 WL 1638477, No. 1:14-CV-2023 (NAM/RFT) (N.D.N.Y. Feb. 21, 2015) (granting Constitution Pipeline condemnation for a New York property along the proposed route) *with Constitution Pipeline Co. v. N.Y. Dep't of Env't. Conserv.*, 868 F.3d 87 (2d Cir. 2017) (upholding New York's denial of a Clean Water Act permit for the Constitution Pipeline Project).

[66] *Midcoast Interstate Transmission v. FERC*, 198 F.3d 960, 968 (D.C. Cir. 2000).

[67] 15 U.S.C. § 717f(h).

[68] *Id.*

[69] *E.g.*, Rachel Adams-Heard, *New York-Bound Shale Gas Pipeline Scrapped After Years of Delays*, BLOOMBERG NEWS (Feb. 24, 2020), https://news.bloomberglaw.com/environment-and-energy/new-york-bound-shale-gas-pipeline-scrapped-after-years-of-delays.

[70] U.S. CONST. AMEND. V.

continued **action** of issuing conditional certificates puts the cart before the horse and subjects landowners to condemnation before the Commission, the conditional certificate-holder, or anyone else, can properly determine whether the project is required by the public convenience and necessity and whether taking the landowner's property is actually necessary under NGA Section 7(h).

The Commission could address this problem in numerous ways. Most easily, it could stop issuing conditional certificates altogether. Notwithstanding the foregoing, as outlined in 2018,[71] were the Commission to determine that a project developer needs a conditional certificate in order to obtain information required for other mandatory authorizations, it could, following NGA Section 7(h), circumscribe the eminent domain authority to enable survey access rights "necessary" to collect the additional data required to make a final determination of public convenience and necessity. Such an interpretation would be entirely analogous with how the Commission treats conditional certificates with respect to construction. To continue to allow pipeline developers to take land based on a preliminary certificate is contrary to Sections 7(e) and 7(h) of the NGA, the Constitution, and to principles of fundamental fairness.

C. The Commission's Consideration of Environmental Impacts

Question C1: NEPA and its implementing regulations require an agency to consider reasonable alternatives to the proposed action. Currently, the Commission considers the no-action alternative, system alternatives, design alternatives, and route alternatives. Should the Commission consider broadening its environmental analysis to consider alternatives beyond those that are currently included? If so, how does the Commission reconcile broadening its environmental analysis to consider alternatives beyond those currently included with Citizens Against Burlington, Inc. v. Busey? *The U.S. Court of Appeals for the District of Columbia clarified that,*

> *[i]n commanding agencies to discuss "alternatives to the proposed action," . . . NEPA plainly refers to alternatives to the "major* Federal *actions significantly affecting the quality of the human*

[71] 2018 PIO Comments at 56–60 & n.192.

> *environment," and not to alternatives to the applicant's proposal. NEPA § 102(2)(C), 42 U.S.C. § 4332(2)(C) (emphasis added). An agency cannot redefine the goals of the proposal that arouses the call for action; it must evaluate alternative ways of achieving its goals, shaped by the application at issue and by the function that the agency plays in the decisional process. Congress did expect agencies to consider an applicant's wants when the agency formulates the goals of its own proposed action. Congress did not expect agencies to determine for the applicant what the goals of the applicant's proposal should be.*

What specific types of additional alternatives should the Commission consider and how would such additional alternatives be consistent with the D.C. Circuit's guidance in Citizens Against Burlington, Inc. v. Busey*? How would the Commission obtain reliable information to perform an analysis of these alternatives?*

ANSWER: Long considered the "heart" of an Environmental Impact Statement, a NEPA alternatives analysis compels agencies to present the environmental impacts of a proposed project in comparative form. Agencies like the Commission must "to the **fullest** extent possible … consider alternatives to its action which would reduce environmental damage."[72] The alternatives requirement "seeks to ensure that each agency decision maker has before him and takes into proper account all possible approaches to a particular project (including total abandonment of the project) which would alter the environmental impact and the cost-benefit balance" and "allows those removed from the initial process to evaluate and balance those factors on their own."[73] Because a robust review of the reasonable alternatives is critical to a proper NEPA analysis, "the existence of a viable but unexamined alternative renders an Environmental Impact Statement inadequate."[74]

[72] *Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109, 1128 (D.C. Cir. 1971) (emphasis in original).

[73] *Id.* at 1114.

[74] *Or. Nat. Desert Ass'n v. BLM*, 625 F.3d 1092, 1100 (9th Cir. 2010) (internal alterations and citations omitted).

The Commission must use a "rule of reason" in identifying the alternatives considered in its environmental review.[75] As noted in *Citizens Against Burlington, Inc. v. Busey*, an agency may not define the objectives of the proposed action in terms that are so narrow so as to render the environmental review a "foreordained formality," or in terms so broad such that "the project would collapse under the weight of the possibilities."[76]

Further, in *Busey*, the D.C. Circuit noted that "Congress did expect agencies to consider an applicant's wants when the agency formulates the goals of its own proposed action. Congress did not expect agencies to determine for the applicant what the goals of the applicant's proposal should be."[77] This does not mean, however, that the Commission is required to blindly adopt the project developer's definition of the project's purpose. Instead, "it must evaluate alternative ways of achieving **its** [i.e., the Commission's] goals, shaped by the application at issue and by the function that the agency plays in the decisional process."[78]

The Commission's goals are, as previously outlined, "to encourage the orderly development of plentiful supplies of electricity and natural gas at reasonable prices"[79] and "protection of the consumer."[80] In the pipeline context, the "function that the [Commission] plays in the decisional process" is that it must only authorize pipelines that are required by the

[75] *Nat. Res. Defense Council v. Morton*, 458 F.2d 827, 837 (D.C. Cir. 1972).

[76] 938 F.2d 190, 196 (D.C. Cir. 1990).

[77] *Id.* at 199.

[78] *Id.*

[79] *NAACP*, 425 U.S. at 669–70.

[80] *Cal. Gas Producers Ass'n v. FPC*, 421 F.2d 422, 428-29 (9th Cir. 1970) ("The Commission's primary duty under the Natural Gas Act is the protection of the consumer."); *see also NAACP*, 425 U.S. at 669–70; *Atl. Refining Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 388 (1959) ("The purpose of the Natural Gas Act was to underwrite just and reasonable rates to the consumers of natural gas."); *FPC v. Hope Gas Co.*, 320 U.S. 591, 610 (1944).

public convenience and necessity; the rest shall be denied.[81] Accordingly, in executing its alternatives review as outlined in *Busey*, the Commission must evaluate alternative ways of achieving the orderly development of gas supplies and consumer protection, and it may only choose the alternative offered by the applicant—building a new pipeline—if there is no less costly or less environmentally harmful means of accomplishing that goal. The level of weight afforded to the project developers' private desires cannot be such so as to overrule FERC's legal duty to only approve projects that are required by the public convenience and necessity.

Further, while the Commission has "a duty to consider the applicant's purpose," it cannot define that purpose in terms that render the project a foregone conclusion under NEPA.[82] This is particularly the case given the high burden outlined in NGA Section 7: the Commission should not go into an alternatives analysis with a presumption that it should select the offered project. To the contrary, the applicants must affirmatively prove that their project is required to meet market demand and serve the public interest.

As noted in the answer to Question A10(a), *supra*, historically, the Commission has defined a project's "purpose" in terms so specific so as to eliminate viable existing infrastructure and non-gas alternatives as options. For example, in the PennEast Pipeline proceeding, the Commission eliminated from consideration generating electricity from renewable sources because "the project's purpose is to transport natural gas and electric generation from renewable energy resources is not a natural gas[.]"[83] However, were the Commission to ask project developers about the gas's end-use—and that end use is electricity generation at a power plant—

[81] 15 U.S.C. §717f(e).

[82] *See Friends of Se's Future v. Morrison*, 153 F.3d 1059, 1066 (9th Cir. 1998) (citing *Busey*).

[83] *PennEast Pipeline Co., LLC*, 162 FERC ¶ 61,052, at P 212 (2018).

then the Commission could reasonably redefine the purpose of the project as generating electricity, rather than generating gas-fired electricity. If the non-gas alternative could sufficiently meet the demand, then the project is not needed and should not be permitted. Such a definition would respect the applicant's core goal (providing electricity), respect the goals of the Commission (orderly development and consumer protection) and work within the constraints of the Commission's legal duties (only permitting required projects). A similar analysis could be used for used for projects where the intended end-use is in heating of buildings.

> *Question C2: Are there any environmental impacts that the Commission does not currently consider in its cumulative impact analysis that could be captured with a broader regional evaluation? If so, how broadly should regions be defined (e.g., which states or geographic boundaries best define different regions), and which environmental resources considered in NEPA would be affected on a larger, regional scale? Does the text of NGA section permit the Commission to do this? If this is contemplated by the NGA, would one applicant's section 7 application prejudice another applicant's section 7 application?*

ANSWER: Comments filed in 2018 covered this topic extensively.[84] In summary, there are many cumulative environmental impacts that the Commission does not currently consider. These include pipeline projects' cumulative impact on emissions, air quality, and public health. Moreover, as outlined in the answers to Section E, *infra*, when building additive infrastructure in an environmental justice community, it is even more important that the Commission consider the cumulative impacts of multiple projects. Multiple projects that individually meet permittable levels can nonetheless cause significant cumulative environmental effects.

Further, while the Policy Statement was intended to protect against overbuilding, the Commission typically reviews pipeline applications in isolation, creating the risk of wasteful duplication and unnecessary infrastructure that exceeds regional needs. Considering each project

[84] *E.g.,* 2018 PIO Comments at 84–87.

is isolation also prevents the Commission from understanding how competing or similar proposals could effectively met one another's alleged demand, or, were both to be approved, how they would cumulatively affect climate, natural resources, and consumer prices.

These concerns were the leading factor behind former Commissioner LaFleur's dissent in both the Mountain Valley Pipeline and Atlantic Coast Pipeline orders.[85] In both cases, Commission staff proposed alternatives that would have merged the projects, but both were dismissed because of the unique project goals of each project sponsors.[86] While the question characterizes a regional review as "prejudic[ing]" one project against another, in reality, ensuring that competing or potentially duplicative projects are considered in light of the other is required by the core missions of the Commission: "to encourage the orderly development"[87] of gas and "protection of the consumer."[88] Approving multiple projects to serve the same demand is not orderly, could lead to higher consumer prices, and is in direct conflict with NGA Section 7's requirement that only projects **required** by the public convenience and necessity be approved.

In terms of how to determine what "regions," it is not necessary for the Commission to impose a defined geographic division. Rather, the core takeaway is that the Commission must be regionally **conscious** in its reviews, such that the additive effects of multiple infrastructure in the same general area, and the potential risk for overbuilding beyond the purported demand, is considered.

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[85] *See generally Atlantic Coast Pipeline, LLC*, 161 FERC ¶ 61,042 (2017), Comm'r LaFleur, dissenting; *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043 (2017), Comm'r LaFleur, dissenting.

[86] *Id.*

[87] *NAACP*, 425 U.S. at 669–70.

[88] *Cal. Gas Producers Ass'n v. FPC*, 421 F.2d 422, 428-29 (9th Cir. 1970) ("The Commission's primary duty under the Natural Gas Act is the protection of the consumer."); *see also NAACP*, 425 U.S. at 669–70; *Atl. Refining Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 388 (1959) ("The purpose of the Natural Gas Act was to underwrite just and reasonable rates to the consumers of natural gas."); *FPC v. Hope Gas Co.*, 320 U.S. 591, 610 (1944).

Question C3(a): In conducting an analysis of a project, how could the Commission consider upstream impacts (e.g., from the drilling of natural gas wells) and downstream end-use impacts?

ANSWER: A robust consideration of upstream and downstream impacts is a **necessary** component to the Commission's certificate reviews. Specifically, the upstream extraction of oil and gas is necessary to fill a proposed pipeline and the end-use combustion[89] is "sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision."[90] To date, the Commission has largely refused to consider these issues—unless directed to by a federal court[91]—on the basis that the Commission lacks adequate information to determine whether a project would have upstream or downstream impacts.[92] But as Chairman Glick has repeatedly pointed out, the Commission is the body responsible for requesting the information necessary to make a sufficient analysis of a project's environmental effects. The Commission regularly asks a project developer to supplement the record via information requests. Nevertheless, the Commission typically has not asked project developers for data regarding upstream extraction or downstream use,[93] calling it an "exercise in futility."[94] The D.C. Circuit reasonably is "dubious of the Commission's assertion that asking [the project developer] to provide additional information about the origin of the gas would futile[.]"[95] Moreover, NEPA requires "the Commission to at least attempt to obtain the information necessary to fulfill its

[89] Over 97 percent of gas is burnt. *See* U.S. EIA., *January 2019 Monthly Energy Review*, at 22 (Jan. 28, 2019), https://www.eia.gov/totalenergy/data/monthly/archive/00351901.pdf (EIA January 2019 Report).

[90] *EarthReports, Inc. v. FERC*, 828 F.3d 949, 956 (D.C. Cir. 2016).

[91] *Sabal Trail*, 867 F.3d 1357 (D.C. Cir. 2017).

[92] *E.g.*, *Tenn. Gas Pipeline Co., L.L.C.*, 169 FERC ¶ 61,230 (2019).

[93] *E.g.*, *Tenn. Gas Pipeline Co., L.L.C.*, 170 FERC ¶ 61,142 (2020).

[94] *Tenn. Gas Pipeline Co., L.L.C.,* 163 FERC ¶ 61,190, at P 60 (2018).

[95] *Birckhead v. FERC*, 925 F.3d 510, 518 (D.C. Cir. 2019) (hereinafter *Birckhead*).

statutory responsibilities."[96] Since the Commission must consider indirect effects equally in order to adequately "evaluate all factors bearing on the public interest,"[97] it also must make all reasonable efforts to obtain the data necessary to make those determinations.

The Commission must begin pressing project developers, upstream shippers, local distribution companies (LDCs), and generators for complete details on the environmental scope of a proposed project because, as "a 'legally relevant cause' of the direct and indirect environmental effects of pipelines it approves," the Commission must review all foreseeable effects of a project—"even where it lacks jurisdiction over the producer or distributor of the gas transported by the pipeline."[98] If all parties involved in the construction, operation, and supply/receipt of gas from a proposed project lack detailed information, the Commission must still consider a project's indirect effects rather than labeling them as outside of the scope of review.[99] Further, if there is insufficient information provided by interested parties to complete its statutory NEPA duties, the Commission should deny or withhold a certificate of public convenience and necessity until more detailed information is provided, rather than ignoring the issues entirely and approving a project with an inadequate NEPA review.

Further, the Commission must consider the full life-cycle analysis of a project's impact on expanded upstream drilling necessary to fill the pipeline for the entire duration of both the project's signed precedent agreements, as well as the useful life of the infrastructure being

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[96] *Id.* at 520.

[97] *Mo. Public Serv. Comm'n v. FERC*, 234 F.3d 36, 38 (D.C. Cir. 2000) (quoting *Atl. Ref. Co. of N.Y. v. Pub. Serv. Comm'n Atl. Refining Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 391 (1959)).

[98] *Birckhead*, 925 F.3d at 519.

[99] *E.g.*, *Mid States Coal. for Progress v. Surface Transp. Bd,* 345 F.3d 520, 549 (8th Cir. 2003) ("[W]hen the **nature** of the effect is reasonably foreseeable, but its **extent** is not, an agency may not simply ignore the effect.") (emphasis in original).

installed. The Commission must also consider how a project would influence growth in downstream usage. When considering the useful life of new infrastructure proposed to replace existing and aging infrastructure, the Commission should consider the increase in capacity compared to existing infrastructure, as well as review how replacing this infrastructure has longer-lasting impacts than allowing existing infrastructure to be decommissioned after it reaches the end of its useful life.

Growth-Inducing Effects

One of the most important considerations that the Commission often fails to incorporate is how approval of bottleneck infrastructure like pipelines incentivizes growth of both drilling and downstream combustion. Courts have repeatedly stated that it is inadequate for an agency to ignore growth-inducing effects where the project has the potential to spur demand.[100] However, the Commission has consistently ignored pipeline and compression capacity upgrades' growth-inducing effects, instead greenlighting approval of these projects where developer applicants downplay the clear intent to expand distribution and use of gas.[101] The Commission ignores these projects' growth inducement despite the American Gas Association openly admitting before the D.C. Circuit that gas infrastructure is "a prerequisite to attracting manufacturing and commercial investments."[102] Energy analysts agree, stating that "to significantly grow production in the future … more access in infrastructure to transport natural gas" is necessary.[103]

[100] *Barnes v. U.S. Dep't of Transp*., 655 F.3d 1124, 1138–39 (9th Cir. 2011) (capacity expansion projects are fundamentally intended to induce growth in demand and agency failure to review those growth-inducing effects is violative of NEPA).

[101] *See Food & Water Watch v. FERC*, D.C. Cir. No. 20-1132 (appeal filed Apr. 21, 2020).

[102] *Food & Water Watch v. FERC*, D.C. Cir. No. 20-1132, "Brief of Amicus Curiae American Gas Association in Support of Respondent," at 14 (filed Oct. 5, 2020).

[103] *New pipelines necessary for Marcellus and Utica shale to play relevant role in supplying natural gas to new Gulf Coast LNG facilities, says Global Data,* GLOBAL DATA (Jan. 20, 2021), https://www.globaldata.com/new-

Moreover, the Commission's analysis must include "growth inducing effects and other effects related to induced changes in the pattern of land use … and related effects on air and water and other natural systems, including ecosystems."[104] This means that not only should the Commission consider the number of wells, but also water usage by drilling operations, changing land use patterns (e.g., destruction of forests and agricultural land), regional water table impacts due to the increase in high-volume hydraulic fracturing, regional Clean Air Act National Ambient Air Quality Standards (NAAQS) attainment status, and greenhouse gas (GHG) emissions from production and combustion of gas. This analysis of growth inducing effects must also assess impacts to endangered species and their habitat from upstream drilling operations and their impacts.[105]

Historically, the Commission has asserted that growth inducing effects are categorically unforeseeable because estimations lack some sort of preternatural or prophetic exactitude.[106] But "NEPA analysis necessarily involves some 'reasonable forecasting,' and ... agencies may sometimes need to make educated assumptions about an uncertain future."[107] Moreover, "when the **nature** of the effect is reasonably foreseeable, but its **extent** is not, an agency may not simply ignore the effect."[108]

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pipelines-necessary-marcellus-utica-shales-play-relevant-role-supplying-natural-gas-new-gulf-coast-lng-facilities-says-globaldata/.

[104] 40 C.F.R. § 1508.8(b); see also *Nat. Res. Def. Council v. Fed. Aviation Admin*., 564 F.3d 549, 560 (2d Cir. 2009) (recognizing NEPA requirement to consider environmental impacts of induced growth).

[105] *Nat'l Wildlife Fed'n v. Coleman*, 529 F.2d 359 (5th Cir. 1976) (requiring analysis of "indirect effects" of highway development on endangered species and habitat); *Riverside Irrigation Dist. v. Andrews*, 758 F.2d 508 (10th Cir. 1985); 50 C.F.R. § 402.02 (definition of effects of the action includes effects that "occur later in time and may include consequences occurring outside the immediate areas involved in the action").

[106] *E.g*., "East 300 Upgrade Project Environmental Assessment," Accession No. 20210219-3034, Docket No. CP20-493, at 88–93.

[107] *Sabal Trail*, 867 F.3d at 1374.

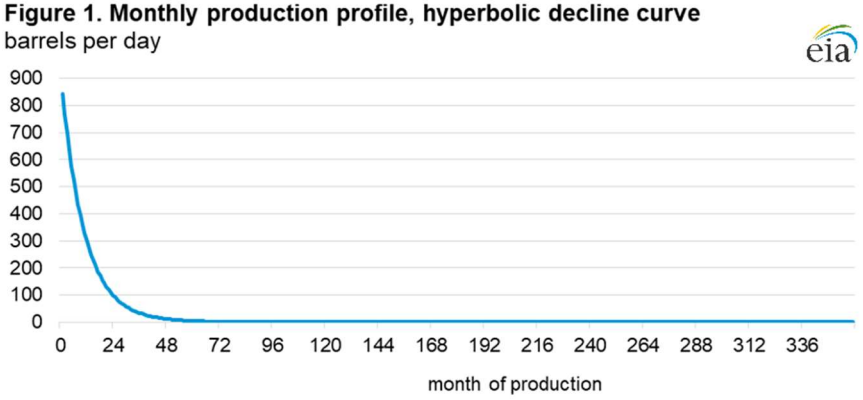
[108] *Mid States Coal. for Progress v. Surface Transp. Bd,* 345 F.3d 520, 549 (8th Cir. 2003).

Upstream Drilling Impacts

Gas transmission infrastructure, by its very nature, requires continual expansion of extraction efforts to maintain current delivery levels and expand capacity. As such, upstream impacts of gas pipeline installation are reasonably foreseeable, even if the full extent of upstream development is not completely known; the Commission cannot ignore these effects under NEPA.[109]

Well decline curves are precipitously steep for shale gas based on historical production data filed by operators in various states. The national average for annual well production decline is roughly 30 percent per annum,[110] however, much of the lifetime decline occurs within the first year. Also, hydraulically fractured shale plays will have different decline rates than conventional wells, with a typical fracked well in the Bakken shale formation declining nearly 70 percent in its first year and more than 85 percent in its first three years.[111]

Figure 1. Monthly production profile, hyperbolic decline curve



[112]

[109] *Id.*

[110] Steve Hendrickson, *Why US Shale Production Declines Are Higher Than You Might Think*, HART ENERGY (June 24, 2020), https://www.hartenergy.com/exclusives/why-us-shale-production-declines-are-higher-you-might-think-188251.

[111] Bethany McLean, *The Next Financial Crisis Lurks Underground*, N.Y. TIMES (Sept. 1, 2018), https://www.nytimes.com/2018/09/01/opinion/the-next-financial-crisis-lurks-underground.html.

[112] U.S. EIA, "Production Decline Curve Analysis in the Annual Energy Outlook 2020," https://www.eia.gov/analysis/drilling/curve_analysis/

Industry admits that 80 percent of shale wells "can easily be uneconomic" due to this rapid collapse in well production.[113] This quick depletion of fracked wells, coupled with a historic glut of gas production, has left the gas industry in a collective net debt of $200 billion—a 300 percent increase from 2005.[114] For fracking operations to remain financially solvent, they need huge investments each year to offset the decline from the previous years' wells—those investments are made based upon the prospect of expanded drilling and available gas transportation infrastructure.[115] With gas production at an all-time high and prices so low that most small to mid-size gas producers are unable to turn a profit, the stability of the entire gas market is based upon the historical trend of low interest rates set by the Federal Reserve over the past decade—not sound financial prospects.[116] This fundamentally flawed ever-expansive business model has resulted in more than 500 bankruptcies in the North American oil and gas industry since 2015, with over 100 oil and gas companies going bankrupt in 2020 alone.[117]

To illustrate the expansive model of upstream extraction: a fracking company drills 100 wells during its first year in a new shale area; needing transportation for its gas supply, it contracts with a pipeline company that will transmit that gas to market. One year after these wells are drilled, its production rate has fallen by 60–80 percent, as is common among many shale gas wells. In order to meet the amount of gas promised to the pipeline, the oil and gas

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[113] Deborah Rogers, *Shale and Wall Street: Was the Decline in Natural Gas Prices Orchestrated?*, at 3, ENERGY POLICY FORUM (Feb. 2013), https://shalebubble.org/wall-street/.

[114] Dr. Amir Azar, *Reserve Base Lending and the Outlook for Shale Oil and Gas Finance*, COLUMBIA UNIVERSITY CENTER ON GLOBAL ENERGY POLICY (May 3, 2017), https://energypolicy.columbia.edu/research/report/reserve-base-lending-and-outlook-shale-oil-and-gas-finance .

[115] *Id*.

[116] Bethany McLean, *The Next Financial Crisis Lurks Underground*, N.Y. TIMES (Sept. 1, 2018), https://www.nytimes.com/2018/09/01/opinion/the-next-financial-crisis-lurks-underground.html.

[117] Paul Takahashi, *Over 100 oil and gas companies went bankrupt in 2020*, MSN NEWS (Jan. 1, 2021), https://www.msn.com/en-us/money/markets/over-100-oil-and-gas-companies-went-bankrupt-in-2020/ar-BB1cVIG8.

company must drill at least 60–80 new wells to make up for the drop in production. This only continues to compound with each successive year, forcing the fracking company to continuously drill to keep up with its contract to the pipeline—as well as the debt leveraged by the company—while selling a product that is often uneconomic. The industry calls this the "Red Queen Effect," after the character in Lewis Carroll's *Through the Looking-Glass* novel. The Red Queen lectures Alice: "Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"[118] To run twice as fast, drillers depend on FERC's near-guaranteed approval of evermore transportation infrastructure.[119]

This expanded drilling requires additional pipeline capacity to flood the market with gas in order for drillers to meet precedent agreement volumes and maintain financial solvency, relying upon expanded distribution networks, new gas-powered generators, and liquefied natural gas (LNG) export facilities to utilize all this gas. Being the bottleneck between production and end-use combustion, expanding gas transportation infrastructure has tremendous impacts on the expansion of upstream drilling.

In order to comply with NEPA, the Commission should amend its Policy Statement to require project developers, upstream affiliates, and project shippers to provide full documentation detailing sourcing of the gas that will be flowing through the pipeline over the course of its life. If this information does not provide sufficient detail as to exact well numbers or specific siting of future drilling development, the Commission may not ignore upstream effects

[118] Hobart M. King, Ph.D., *Production and Royalty Declines in a Natural Gas Well Over Time*, GEOLOGY.COM, https://geology.com/royalty/production-decline.shtml (last accessed May 19, 2021).

[119] Since 2000, FERC has approved over 99 percent of all gas infrastructure applications before it. Press Release, House Subcom. on Civil Rights and Civil Liberties, Subcommittee Releases Preliminary Findings Showing FERC Pipeline Approval Process Skewed Against Landowners (Apr. 28, 2020), https://oversight.house.gov/news/press-releases/subcommittee-releases-preliminary-findings-showing-ferc-pipeline-approval (last visited Oct. 23, 2020).

entirely.[120] The Commission should instead provide estimates of upstream production impacts based upon a range of scenarios informed by contracted gas volume, project capacity, and well production averages for the geographic source of gas.[121] Average production rates and production methods from wells in the supply region could be obtained from state databases, which could then be used to estimate the number of wells and the types of equipment and production methods necessary to supply the full pipeline capacity. Such estimations would indubitably provide a more detailed picture of the environmental impacts of agency action than the Commission's default policy of disregarding upstream impacts where concrete well site information is not voluntarily directly provided by project developers.

Moreover, where the Commission lacks sufficient information for informed estimation, the Commission should either require record supplementation by project developers and their project shippers or deny issuance of a certificate due to lack of sufficient data. What the Commission should not do is determine that information is insufficient to adequately assess upstream impacts and then approve the project despite lacking sufficient information to reasonably determine whether a project is truly in the public interest. Where there is incomplete information on specific well-sites, the Commission should employ market tools available to assess a project's effect on demand and employ state and Energy Information Administration data on average well volumes so that a range of wells necessary for the life of the project could be approximated. Also, identifying shale plays will provide significant information for more detailed estimations.

[120] *Mid States Coal. for Progress v. Surface Transp. Bd,* 345 F.3d 520, 549 (8th Cir. 2003).

[121] The Commission has done this to some extent previously. *See, e.g.*, *Transcon. Gas Pipe Line Co., LLC*, 158 ¶ 61.125, at PP 139–41 (2017).

Specifically, the Commission should evaluate the methane and carbon dioxide emissions from the following sources: drilling; well completion, including hydraulic fracturing; wellsite equipment, such as heaters, separators, and dehydrators; gathering and boosting stations; pneumatic devices; tanks; malfunctions and upsets; processing plants; and pipeline and metering and regulation station leaks. In doing so, the Commission must consider that methane emissions from the gas supply chain are much higher than previously estimated by the U.S. Environmental Protection Agency (EPA).[122] These emissions are predominantly pure methane, which has roughly 80 times the climate warming impact of carbon dioxide over a 20-year timespan.[123]

These are not crystal ball inquiries.[124] Rather than meaningfully looking at the broader context of pipelines, the Commission regularly ignores upstream issues entirely, which places a finger on the scale in favor of project developers and provides inadequate information for FERC to decide whether a project is truly required by public convenience and necessity.

Downstream Impacts

When considering the downstream impacts of a pipeline project, the Commission has been acting upon an improperly narrow reading of the D.C. Circuit's holding in *Sierra Club v. FERC* (*Sabal Trail*),[125] requiring analysis of downstream impacts only in the event of a pipeline directly feeding identified gas-powered generators. However, this reading is contrary to the

[122] *See, e.g.*, *Emission Factors for Greenhouse Gas Inventories*, EPA (2014), https://perma.cc/VLK8-7G8C; Emissions Factors, IEA (2017), *available at* http://data.iea.org/payment/products/122-emissions-factors-2017-edition.aspx; Life Cycle Analysis of Natural Gas Extraction and Power Generation, NETL (May 29, 2014), https://perma.cc/TA2G-7GMG.

[123] *See, e.g.*, Ramón Alvarez, et al., *Assessment of methane emissions from U.S. oil and gas supply chain*, SCIENCE (June 21, 2018), http://science.sciencemag.org/content/early/2018/06/20/science.aar7204.full.

[124] *Nat. Res. Def. Council, Inc. v. Morton*, 458 F.2d 827, 837 (D.C. Cir. 1972) ("Mere administrative difficulty does not interpose such flexibility into the requirements of NEPA as to undercut the duty of compliance 'to the fullest extent possible.'").

[125] 867 F.3d 1357 (D.C. Cir. 2017).

court's decision in *Sabal Trail* and is grossly inadequate to ensure that the Commission makes an informed public interest determination.[126]

In addition to including a range of emissions employing a full-burn scenario,[127] for power plants, the Commission should assume that all downstream gas will be combusted unless the project developer clearly demonstrates otherwise.[128] This should be no different for LDCs, which supply gas for residential, commercial, and industrial uses as almost all gas within these systems is combusted.[129] Commission review of downstream residential and commercial end-use is of the utmost importance since, unlike gas-powered generators, these individual, residential, and commercial uses largely lack EPA oversight for Clean Air Act compliance, yet account for over 25 percent of all gas usage in the U.S.[130]

Further, when increasing transportation infrastructure that feeds into LDCs and gas-powered generators, the Commission must consider the growth inducing effects that such an expansion will have on the service territory. Industry recognizes that expanding transportation capacity is "a prerequisite to attracting manufacturing and commercial investments,"[131] demonstrating that installing pipeline infrastructure is often developed in advance of broader

[126] *Birckhead*, 925 F.3d at 519 (*Sabal Trail* "hardly suggests that downstream emissions are an indirect effect of a project only when the project's 'entire purpose' is to transport gas to be burned at 'specifically-identified' destinations.").

[127] Numerous federal agencies use this "full burn" assumption—that a project's full capacity will be used, with all fossil fuel combusted—when assessing energy projects. Jayni Hein et al., *Pipeline Approvals and Greenhouse Gas Emissions*, NYU INST. FOR POLICY INTEGRITY (2019), https://policyintegrity.org/files/publications/Pipeline_Approvals_and_GHG_Emissions.pdf (hereinafter IPI Report).

[128] *See* EIA January 2019 Report at 22.

[129] *Id*.

[130] Energy Info. Admin., *Natural Gas Explained – use of natural gas*, https://www.eia.gov/energyexplained/natural-gas/use-of-natural-gas.php (last accessed May 19, 2021).

[131] *Food & Water Watch v. FERC*, D.C. Cir. No. 20-1132, "Brief of Amicus Curiae American Gas Association in Support of Respondent," at 14 (filed Oct. 5, 2020).

regional growth in an "if you build it, they will come" approach to growing an otherwise stagnant LDC or electric utility business. NEPA requires that FERC analyze those impacts.

Additionally, while there has been dispute between the U.S. Department of Energy (DOE) and the Commission over which party should be responsible for considering indirect emissions from the approval of LNG export facilities,[132] the Commission should step up to ensure that the full scope of GHG emissions is disclosed and considered in its approval of LNG export infrastructure. The Commission could easily provide a range of emissions possibilities based upon facility capacity and historical export figures from other LNG export facilities. Such information would better inform agency decisionmaking and provide the public with valuable information that is currently being completely ignored by federal officials when considering approval of LNG export infrastructure and DOE approval of LNG export.

In addition, when reviewing air quality impacts of a project, the Commission must consider more than the immediate air quality surrounding compressor stations and pipeline infrastructure. When reviewing downstream emissions and growth-inducing effects, the Commission should consider the downstream area's attainment of NAAQS under the Clean Air Act.[133] Oftentimes, projects that the Commission deems as having unforeseeable downstream effects, in fact, have entirely foreseeable air quality impacts on communities where LDCs operate in already degraded airsheds.

[132] *EarthReports, Inc. v. Fed. Energy Regulatory Comm'n*, 828 F.3d 949 (D.C. Cir. 2016); *see also* Dep't of Energy, *National Environmental Policy Act Implementing Procedures*, 85 Fed. Reg. 78,197 (Dec. 4, 2020).

[133] *See* EPA, *NAAQS Table*, https://www.epa.gov/criteria-air-pollutants/naaqs-table.

Infrastructure Lifespan Analysis

NEPA was specifically "designed to deal with the **long-range implications** of the crucial environmental problems" of our time.[134] However, even in the Commission's most recent *Northern Natural* decision, which contained improvements to its consideration of GHGs, it has nonetheless extended the lifespan of gas transportation systems, expanded capacity, and enabled longer contract periods without critical consideration of the long-range implications.[135] Such a policy does not account for NEPA's requirement that federal agencies "recognize the worldwide and long-range character of environmental problems."[136]

Moreover, to stay within the 1.5°C budget necessary to avoid the worst impacts of climate change, the International Energy Agency (IEA) has stated that "a huge decline in the use of fossil fuels" is necessary and predicts "trade by pipeline [to] fall[] by 65%" by 2050, well within the lifespan of new and modified infrastructure approved today.[137] As such, when replacing existing pipeline and compression infrastructure with new equipment, oftentimes with greater capacity, the Commission must consider the environmental consequences of extending the useful life of this infrastructure and how a project not only increases emissions due to capacity increases, but also due to increased temporal longevity.

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[134] S. Rep. No. 91-296 (1969). This report is also published in full at: 115 Cong. Rec. 19,008 (1969) as part of a Senate floor debate on bill S. 1075. (emphasis added).

[135] *See, e.g.*, *N. Nat. Gas Co.*, 174 FERC ¶ 61,189, at P 29 (2021).

[136] 42 U.S.C. § 4332(F).

[137] Int'l Energy Agency, *Net Zero by 2050: A Roadmap for the Global Energy Sector* (2021), at 18, 103, https://iea.blob.core.windows.net/assets/4719e321-6d3d-41a2-bd6b-461ad2f850a8/NetZeroby2050-ARoadmapfortheGlobalEnergySector.pdf. *See also* Stanley Reed, *I.E.A. Climate Report Calls for End of New Oil and Gas Projects*, N.Y. TIMES (May 18, 2021), https://www.nytimes.com/2021/05/18/business/climate-change-report.html.

In *Northern Natural*, the Commission, for the first time, recognized that it is fully capable of analyzing the significance of a project's emissions.[138] This is a welcome, but incomplete, step forward. Specifically, the Commission still ignored the increased lifetime emissions of a project that sought to replace pipeline infrastructure that was nearing the end of its operational lifespan.[139] This practice provides an inadequate picture of the true environmental consequences of replacing aging infrastructure, since such replacements keep fossil fuel interests entrenched at a time when the U.S. Global Change Research Project (USGCRP) and United Nations Intergovernmental Panel on Climate Change (IPCC) agree that drastic reductions in fossil fuel use and a rapid transition to a carbon-free economy are necessary to maintain global climatological stability.[140] The Commission must require applicants to provide details on the useful life of gas infrastructure and explanations as to how replacement or expansion would extend infrastructure lifespans. Such a policy is necessary to meet the levels of decarbonization necessary to avert the most catastrophic effects of global climate change and to comply with NEPA's requirement to assess long-term consequences of agency action.

Moreover, the Commission "must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a vacuum."[141] Accordingly, the Commission must analyze the impacts of each of its actions in the context of its other permitting decisions. This is necessary to prevent FERC from concluding that any particular decision will "have an

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[138] *N. Nat. Gas Co.*, 174 FERC ¶ 61,189, at P 29 (2021).

[139] *Id.*

[140] IPCC, *Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by government* (Oct. 8, 2018), https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/ (Chapter 2 at 2-5. Pathways not inconsistent with 1.5°C must have net-zero emissions within 25 +/- 15-20 years); USGCRP (2018) *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II.*

[141] *Grand Canyon Tr. v. Fed. Aviation Admin.*, 290 F.3d 339, 342 (D.C. Cir. 2002), *as amended* (Aug. 27, 2002).

individually minor effect on the environment," even though the total impact will be "collectively significant."[142] NEPA requires agencies to "provide the necessary contextual information about the cumulative and incremental environmental impacts of the [agency action] in light of other [agency actions] and other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions."[143]

Question C3(b): Should applicants be required to provide information on the origin and end use of the gas?

ANSWER: Project developers must be required to provide information on the origin of the gas running through the infrastructure they propose before the Commission, as fully understanding a project's upstream and downstream impacts is necessary to making informed decisions on whether a project is truly in the public interest. Failing to request this information from project applicants, and those with whom they have contracted, would violate both the letter and spirit of NEPA, as the law requires "the Commission to at least attempt to obtain the information necessary to fulfill its statutory responsibilities."[144]

Gas project development involves coordination of several contractual agreements among producers, upstream shippers, midstream transmission developers, and downstream users—without that information, a project developer cannot show that its proposal is required by the public convenience and necessity. This information clearly exists; it is often necessary for investment purposes. Moreover, given that the majority of transmission lines are owned by a handful of large vertically integrated parent corporations, such information on most pipeline

[142] *Ctr. for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1217 (9th Cir. 2008) (quoting 40 C.F.R. § 1508.7 (1978) (cleaned up).

[143] *Id.*; *California v. Bernhardt*, 472 F. Supp. 3d 573, 625 (N.D. Cal 2020), *appeal filed*, 9th Cir Case No. 20-16801 ("[B]LM should have considered the cumulative impact of the Rescission when combined with its nationwide oil and gas program, also known as the 'fossil fuel program.'").

[144] *Birckhead*, 925 F.3d at 520.

projects would be readily accessible by the transmission developer. For example, Kinder Morgan owns over 70,000 miles of gas transmission lines and over 40 percent of all fossil gas in the U.S. moves through its lines. It also owns numerous subsidiaries controlling all levels of the fossil gas supply chain: well-site gathering and processing infrastructure, intrastate transmission pipeline, gas storage facilities, and multiple NGA Section 7 LNG terminals. Such information should not be shielded by mega-corporations using shell companies to obscure sourcing or end-use, thereby allowing them to receive a perfunctory environmental review of their projects.

Question C3(c): How would the Commission determine end-use impacts if the gas is sent to a pooling point or a mid-stream shipper?

ANSWER: The D.C. Circuit was clear when it stated that "NEPA analysis necessarily involves some 'reasonable forecasting,' and ... agencies may sometimes need to make educated assumptions about an uncertain future."[145] The Commission may not disregard downstream emissions simply because the gas moves to a pooling point or midstream shipper—it must make an educated assumption about end use. As the Commission knows, over 97 percent of all gas moved through the U.S. is burned, resulting in direct emissions of GHGs into the atmosphere.[146] Additionally, the unburned 3 percent of fossil gas is either moved to export for combustion overseas, escapes directly into the atmosphere as methane (a potent GHG with a 20-year effect roughly 80 times that of carbon dioxide), or is converted into feedstock for petrochemicals and plastics precursors.[147] As such, the Commission can reasonably forecast that unless otherwise

[145] *Id.* (citing *Sabal Trail*, 867 F.3d at 1374).

[146] EIA January 2019 Report at 22; *see also Tenn. Gas Pipeline Co., L.L.C.*, 170 FERC ¶ 61,142 (Feb. 21, 2020), Comm'r Glick, dissenting, at p.8.

[147] Food & Water Watch, *Fracking End Game* (June 1, 2019), https://foodandwaterwatch.org/wp-content/uploads/2021/03/rpt_1905_fracking-2019-web_2.pdf.

demonstrated by an applicant, all gas moved through a pipeline will be combusted by end-users, whether they are foreign or domestic, LDCs, or electric generators.

Understanding that effectively all gas moved through a pipeline will be combusted, a range of volumetric emissions calculations can be readily determined through use of contracted gas amounts, project capacity, and supply contract durations. Moreover, NEPA's statutory text expressly states that federal agencies' regulations must "recognize the worldwide and long-range character of environmental problems." [148] As such, emissions calculations must include estimates of GHG emissions over not just the life of the existing precedent agreements, but also the expected lifespan of the infrastructure to fully account for a project's long-term impacts.

Moreover, the Commission should request additional information from midstream shippers and pooling point operators about ultimate destinations for the gas passing through the proposed infrastructure. This would allow FERC to more adequately assess not just the GHG emissions but also the impact that this gas has on downstream air quality and public health, since its ultimate combustion in downstream service territories is a reasonably foreseeable effect of approving a pipeline to supply midstream shippers and pooling points with gas.

Question C3(d): If the end use is electric generation or an LDC, how would the Commission determine the GHG emissions of existing and anticipated gas usage attributed to a project?

ANSWER: If the end use is electric generation or an LDC, the Commission must assume that combustion is the end use as discussed *supra*.[149] Given the necessity for rapid

[148] 42 U.S.C. § 4332(C)(iv).

[149] As Chairman Glick has noted, since 97 percent of gas in the U.S. is combusted, it is "a relatively easy case" to determine the end-use. *Tenn, Gas Pipeline Co., L.L.C.*, 170 FERC ¶ 61,142 (Feb. 21, 2020), Comm'r Glick, dissenting, at p.8.

decarbonization across all sectors of the American economy,[150] when assessing existing gas usage for projects that increase capacity, the Commission should calculate a range of emissions scenarios that include a no-action alternative where existing infrastructure stays active until the end of its operational life and a scenario where additional capacity is installed and older equipment is replaced with new materials. Additionally, when determining anticipated gas usage, a full-burn analysis based upon currently contracted volumes and total project capacity is needed, since variability in future demand is not an excuse to ignore downstream emissions.[151]

Question C3(e): How would additional information related to upstream or downstream impacts of a proposed project inform the Commission's decision on an application?

ANSWER: The D.C. Circuit has made clear that the Commission is a "legally relevant cause" of upstream and downstream effects "even where it lacks jurisdiction over the producer or distributor of the gas transported by the pipeline"[152] because it has the authority to "deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment."[153] A full-scope analysis of gas infrastructure provides the Commission with a detailed review of environmental impacts resulting from a project and allows the Commission to better determine whether to approve or deny a certificate, as the public interest analysis requires. Specifically, it better enables the Commission to balance the full scope of environmental harms of a project against its potential benefits.

[150] Executive Order 13990, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," 86 Fed. Reg. 7,037 (Jan. 25, 2021) (hereinafter EO 13990); Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," 86 Fed. Reg. 7619 (Jan. 27, 2021).

[151] *Sabal Trail*, 867 F.3d at 1374; *see also Dominion Transmission, Inc.,* 163 FERC ¶ 61,128 (2018), Comm'r LaFleur, dissenting in part, at p.4 ("I reject the view that if a specified end-use is not discernible, we should simply ignore such environmental impacts. In that case, we should disclose what we can, such as a full-burn calculation of GHG emissions").

[152] *Birckhead*, 925 F.3d at 520.

[153] *Sabal Trail*, 867 F.3d at 1373.

Moreover, additional information on upstream and downstream impacts would give the Commission more information on whether a project is actually needed by the downstream users or whether the additional pipeline capacity would instead be used to support drilling over-development as a way of contending with the effect of diminishing returns on existing wells or to enrich related shell companies. Additional upstream and downstream information would also better inform the Commission early on in the NEPA process as to whether a project requires an Environmental Impact Statement in lieu of an Environmental Assessment.

Question C3(f): Should shippers who have subscribed capacity on a project (or potentially, the shippers' customers) be encouraged to provide the type of information contemplated above? If so, how might this be done?

ANSWER: First, shipper information is not necessary to determine a proposed project's indirect emissions, as total volumes are sufficient to provide a range of downstream emissions calculations.[154] Second, the Commission has authority to deny a project where applicants refuse to give sufficiently detailed information to determine whether a project's environmental consequences disproportionately harm the public.[155] Moreover, given that the NGA states that "[f]ederal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce **is necessary in the public interest,**"[156] the Commission's finding that a project is required by the public convenience and necessity incorporates an affirmative showing that its environmental harms are not overly onerous when balanced against other factors.

[154] *Dominion Transmission, Inc.,* 163 FERC ¶ 61,128 (2018), Comm'r LaFleur, dissenting in part, at p.4 ("I reject the view that if a specified end-use is not discernible, we should simply ignore such environmental impacts. In that case, we should disclose what we can, such as a full-burn calculation of GHG emissions").

[155] *Birckhead*, 925 F.3d at 520 ("It should go without saying that NEPA also requires the Commission to at least attempt to obtain the information necessary to fulfill its statutory responsibilities.").

[156] 15 U.S.C. §717(a) (emphasis added).

Given this, shippers with subscribed capacity have a substantial interest in a project application. The Commission should require project developers to obtain and submit information on upstream production and downstream end-use. Too often, the Commission has allowed applicants to skirt by with inadequate information on indirect effects, oftentimes approving a project without even requesting information on upstream sourcing or downstream uses. To ensure that project applicants and shippers with subscribed capacity provide adequate information, the Commission must institute a policy that withholds or denies project applications with inadequate information to demonstrate that a project would truly be in the public interest. Currently, there is an improper unspoken presumption that a project is in the public interest unless proven otherwise—in direct conflict with NGA Section 7's legal standard.

Question C3(g): How could such a policy be squared with CEQ's final rule?

ANSWER: The Commission should ensure that its reviews are compliant with the Council on Environmental Quality's (CEQ) 1978 regulations, which were replaced by the Trump administration's 2020 rule, as the CEQ has requested that the U.S. District Court for the Western District of Virginia remand the final rule to it since there are "substantial and legitimate concerns" about its legality and CEQ is considering "a process to amend or repeal" it.[157] Additionally, Executive Order 13990 has directed all federal agencies to cease rulemaking efforts to align agency regulations to the 2020 final rule, indicating that any agency action should comply with historical NEPA requirements.[158]

[157] *Wild Virginia, et al. v. CEQ*, W.D.Va. Case No. 3:20-cv-00045-JPJ-PMS, Defendant's Motion for Remand Without Vacatur, *available at* https://www.eenews.net/assets/2021/03/18/document_cw_02.pdf.

[158] EO 13990, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis." 86 Fed. Reg. 7,037 (Jan. 25, 2021).

Moreover, there is no conflict between these recommendations and the 2020 NEPA rule, as NEPA itself requires consideration of reasonably foreseeable effects resulting from approval of a project.[159] Congress declared "that it is the continuing policy of the Federal Government … to use all practicable means and measures … to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and **future generations** of Americans."[160] This call for decisionmakers to use "all practicable means and measures … to create and maintain conditions under which man and nature can exist in productive harmony" strongly counsels against a narrow implementation of NEPA's provisions.

Additionally, the plain text of NEPA Section 102 requires that agencies report on "the environmental impact of the proposed action" and "**any** adverse environmental effects which cannot be avoided should the proposal be implemented."[161] The Act further specifies that an Environmental Impact Statement should discuss "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity."[162] Moreover, the statute expressly states that federal agencies' regulations must "recognize **the worldwide and long-range character of environmental problems**."[163] Thus, NEPA is meant not only to consider the immediate, direct effects of a project but also how it might impact the environment in the long-term through indirect and/or cumulative effects in tandem with other agency actions, projects, or development trends.

[159] 42 U.S.C. § 4332(C)(i)-(ii).

[160] 42 U.S.C. § 4331(a) (emphasis added).

[161] 42 U.S.C. § 4332(C)(i)-(ii) (emphasis added).

[162] *Id*. at (iv).

[163] *See* 42 U.S.C. § 4332(F) (emphasis added).

The very premise of NEPA is to provide the necessary information to governmental actors so they may consider how the environment may be impacted directly, indirectly, and over the course of aggregated and cumulative projects. Without a broad and long-term review of impacts from agency actions, governmental actors will artificially discount the negative impacts that a proposed action may have on the environment and will fail to properly consider how a single action interrelates with other environmental impacts.

The question under NEPA, therefore, has been not whether the effect is remote, but whether it is unreasonably so because it is remote **and only** speculative.[164] When read in conjunction with historical understanding of the statute, it is clear that NEPA requires agencies to address long-term consequences of broader industry development, how projects incentivize future development, how one action facilitates subsequent environmental impacts, and how activities in one location can have substantial impacts elsewhere.

Question C4(a): In conducting an analysis of the impact of a project's GHG emissions, how could the Commission determine the significance of these emissions' contribution to climate change?

ANSWER: In its recent *Northern Natural* pipeline approval, the Commission finally recognized that it must make all reasonable efforts to assess the significance of a project's emissions.[165] The Commission's prior refusal to attempt to assess significance whatsoever ignored that "[t]he mere fact that the magnitude of [an effect] is uncertain is no justification for disregarding the effect entirely."[166] Moreover, "it is not releases of [pollution] that Congress

[164] *See, e.g.*, *Env't. Def. Fund, Inc. v. Andrus*, 619 F.2d 1368, 1369 (10th Cir. 1980).

[165] *E.g.*, *N. Nat. Gas Co.*, 174 FERC ¶ 61,189, at P 29 (2021). But see *N. Nat. Gas Co.*, 174 FERC ¶ 61,146 (2021), Chairman Glick, Comm'r Clements, dissenting in part, at pp.4–5; *Tuscarora Gas Transmission Co.*, 175 FERC ¶ 61,147 (2021), Chairman Glick, Comm'r Clements, dissenting in part, at p.2 (noting that the Commission still needs to do more to enable it to conduct a significance assessment).

[166] *Pub. Citizen v. Fed. Motor Carrier Safety Admin*., 374 F.3d 1209, 1219 (D.C. Cir. 2004).

wanted disclosed; it is [the] environmental significance[] of those releases."[167] Listing, without contextualizing, the volume of GHG emissions "does not reveal the meaning of those impacts in terms of human health or other environmental values."[168] Under the Commission's historical GHG approach, by **categorically** ignoring GHG significance on the project-level, the Commission improperly determined that **every** individual project's impact on climate change is functionally **zero**.[169] This is impermissible as the "fact that climate change is largely a global phenomenon that includes actions ... outside of [the agency's] control ... does not release the agency from the duty of assessing the effects of its actions on global warming."[170]

Contrary to the Commission's prior claims, a "universally accepted" methodology for assessing GHG significance is not necessary.[171] The Commission regularly considers environmental impacts with no objective or universally accepted significance determinant, such as the loss of acres of forest or wetlands, despite the absence of a legally enforceable or established numerical limit or threshold on how many trees may be cut or how many acres of wetlands may be impacted.[172]

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[167] *Nat. Res. Def. Council v. U.S. Nuclear Regul. Comm'n*, 685 F.2d 459, 487 (D.C. Cir. 1982).

[168] *Id.* at 486; *see also generally N. Nat. Gas Co.*, 174 FERC ¶ 61,189 (2021).

[169] *Ctr. for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1200 (9th Cir. 2008) (there is a range of cost figures, "the value of carbon emissions reduction is certainly not zero").

[170] *Id.* at 1217.

[171] *See*, *e.g.*, *Food & Water Watch v. FERC*, D.C. Cir. No. 20-1132 (FERC required any GHG methodology to have universal acceptance for its utility to be recognized); *compare with Myersville Citizens for a Rural Cmty., Inc. v. FERC*, 783 F.3d 1301, 1322 (D.C. Cir. 2015) (Agencies cannot overlook a single environmental consequence if it is even "arguably significant."); *Michigan v. EPA*, 135 S. Ct. 2699, 2706, 576 U.S. 743 (2015) ("Not only must an agency's decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational.") (*internal quotation marks omitted*); *Motor Vehicle Mfrs. Ass'n, Inc. v. State Farm Mut. Auto. Ins. Co*., 463 U.S. 29, 43 (1983) (explaining that agency action is "arbitrary and capricious if the agency has . . . 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"). *See also Jordan Cove Energy Project L.P.*, 170 FERC ¶ 61,202 (2020), Comm'r Glick, dissenting, at p.9 ("But the lack of a single consensus methodology does not prevent the Commission from adopting **a** methodology, even if it is not universally accepted.").

[172] *See, e.g*., "Final Environmental Impact Statement: Constitution Pipeline and Wright Interconnect Projects," Accession No. 20141024-4001, Docket Nos. CP13-499-000, CP13-502-000, PF12-9-000, at 4-79. In a

Any GHG significance analysis that the Commission chooses to use can and should be used in tandem with the Social Cost of Carbon (SCC). While the Commission has argued that the SCC is not useful for NEPA purposes,[173] its failure to employ **any** available tools that could be utilized to analyze the cumulative significance and severity of emissions and associated climate implications deprives the public of vital information on a project's GHG emissions and the climate implications of its approvals.[174]

In his first day in office, President Biden issued Executive Order 13990, which seeks to account for the benefits of reducing climate-altering pollution, such as GHG emissions from gas infrastructure. Understanding that accountability is vital to acting in a responsible manner, the Order stated:

> It is essential that agencies capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account. Doing so facilitates sound decision-making, recognizes the breadth of climate impacts, and supports the international leadership of the United States on climate issues. The "social cost of carbon" (SCC), "social cost of nitrous oxide" (SCN), and "social cost of methane" (SCM) are estimates of the monetized damages associated with incremental increases in greenhouse gas emissions. They are intended to include changes in net agricultural productivity, human health, property damage from increased flood risk, and the value of ecosystem services. An accurate social cost is essential for agencies to accurately determine the social benefits of reducing greenhouse gas emissions when conducting cost-benefit analyses of regulatory and other actions.[175]

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separate comment filed on this docket filed only on its behalf, Natural Resources Defense Council offers a "Climate Test" tool that it has developed that would enable the Commission to establish the significance of emissions from individual projects using an equation that takes into account, *inter alia*, the remaining carbon budget and the remaining regional fuel need that will be supplied by the proposed project.

[173] *EarthReports, Inc. v. FERC*, 828 F.3d 949, 956 (D.C. Cir. 2016). Note, however, that the Commission has acknowledged previously that other agencies have chosen to use the SCC and have been "faulted for failing to use it." *Mountain Valley Pipeline, LLC*, 163 FERC ¶ 61,197, at P 281 (2018).

[174] *Mont. Env't Info. Ctr. v. U.S. Office of Surface Mining*, 274 F. Supp. 3d 1074, 1091 (D. Mont. 2017) (vacating the Office of Surface Mining and Enforcement's mining plan Environmental Assessment on several grounds and stating, "an agency should not attempt to travel the easy path and hastily label the impact of the [action] as too speculative and not worthy of agency review.")

[175] EO 13990 at Sec 5.

In executing its NGA duty to only approve pipelines required by the public convenience and necessity, the Commission necessarily is required to balance societal long-term costs against the purported benefits of expanded gas transmission. Moreover, NEPA "mandates a rather finely tuned and 'systematic' balancing analysis in each instance."[176] The purpose of this balancing is to "ensure that each agency decision maker has before him and takes into proper account all possible approaches to a particular project (including total abandonment of the project) which would alter the environmental impact and the cost-benefit balance. Only in that fashion is it likely that the most intelligent, optimally beneficial decision will ultimately be made."[177]

Executive Order 13990 then re-established the Interagency Working Group (IWG) on the Social Cost of Greenhouse Gases, which had been dissolved under the previous administration. This group then issued interim guidance that followed the recommendations of the 2016 estimates of the Social Cost of Greenhouse Gases.[178] In order to monetize GHG emissions, the Commission should use the best available estimates for the monetized climate damages of greenhouse gases that are consistent with science and economics. While the interim guidance has recommended the prior IWG's $51/ton price of carbon, these values are expected to increase in January 2022 after the administration completes a comprehensive overhaul of carbon's cost. Recent research has shown that a more reasonable median estimation of CO2e's social cost is closer to $417/ton, with upper ranges reaching $805/ton.[179]

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[176] *Calvert Cliffs Coordinating Comm. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109, 1113-14 & nn.8-9 (D.C. Cir. 1971); 42 U.S.C. § 4332(2)(B).

[177] *Calvert Cliffs Coordinating Comm.*, 449 F.2d at 1114.

[178] Interagency Working Grp. on the Soc. Cost of Carbon, *Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866* (2010), https://19january2017snapshot.epa.gov/sites/production/files/2016-12/documents/scc_tsd_2010.pdf (hereinafter IWG 2010 Technical Support Document).

[179] Katharine Rickie et al, *Country-level social cost of carbon*, NATURE CLIM. CHANGE 8, 895–900 (2018), *available at* https://doi.org/10.1038/s41558-018-0282-y.

DOE, the U.S. Government Accountability Office, and the National Academies of Science also all recognize the utility of the SCC[180] and these methodologies are widely used throughout federal and state decisionmaking.[181] Moreover, the Commission itself has conceded that the SCC "can be used to estimate incremental physical climate change impacts"[182] and acknowledged that the SCC holds utility in "estimat[ing] the monetized climate change damage associated with an incremental increase in [GHG] emissions" often seen in capacity upgrades or infrastructure replacement.[183]

Additionally, by monetizing emissions, the Commission can provide clear information to the public as to how additional GHGs contribute to a variety of damages, including property damages, energy demand effects, lost agricultural productivity, human mortality and morbidity, lost ecosystem services, and nonmarket amenities, and so forth.[184] Through monetizing climate change impacts, Commission staff can assess and disclose the climate consequences of its actions in a meaningful and accessible way to decisionmakers and the public.[185] Chairman Glick

[180] BOEM, *Consumer Surplus and Energy Substitutes for OCS Oil and Gas Production: The 2015 Revised Market Simulation Model (MarketSim)* (2015); Peter Howard, *The Bureau of Land Management's Modeling Choice for the Federal Coal Programmatic Review* 6, N.Y.U. INST. FOR POLICY INTEGRITY (2016) (hereinafter *Modeling Choice*); EIA, *Coal Market Module of the National Energy Modeling System: Model Documentation 2020* (2020); *see also Mayo Found. v. Surface Transp. Bd*., 472 F.3d 545, 555 (8th Cir. 2006) (discussing Board's use of NEMS); *Modeling Choice* at 8 (highlighting other uses); EPA, *Integrated Planning Model (IPM) Results Viewer*; *Modeling Choice* at 10–11.

[181] *The Cost of Carbon Pollution*, NYU INST. FOR POLICY INTEGRITY, https://costofcarbon.org/ (last accessed May 19, 2021). *See also* "Greenhouse Gas (GHG) Accounting Tools," NEPA.GOV, https://ceq.doe.gov/guidance/ghg-accounting-tools.html (last accessed May 20, 2021); "DoD Climate Assessment Tool," DOD, https://media.defense.gov/2021/Apr/05/2002614579/-1/-1/0/DOD-CLIMATE-ASSESSMENT-TOOL.PDF (last accessed May 20, 2021).

[182] *E.g*., "Final Environmental Impact Statement: Rio Grande LNG Project," Accession No. 20190426-3020, Docket Nos. CP16-454-000, CP16-455-000, Vol. III, pt. 3, at 23 (emphasis added).

[183] *Atlantic Coast Pipeline, LLC*, 164 FERC ¶ 61,100, at P 277 (2018).

[184] IWG 2010 Technical Support Document.

[185] *See Or. Nat. Desert Ass'n v. BLM*, 625 F.3d 1092, 1099-10 (9th Cir. 2008) (requiring agencies to "take a 'hard look' at how the choices before them affect the environment, and then to place their data and conclusions before the public"); *see also Mont. Env't Info. Ctr. v. U.S. Office of Surface Mining*, 2017 WL 348026, CV 15-106-M-DWM 2, at *12 (D. Mont. Aug. 14, 2017) (agency acted arbitrarily and capriciously by quantifying the benefits

has recognized that "the output from the [SCC] tool can serve as an indicator of the climate change impact … informing the overall qualitative evaluation under NEPA as well as the public interest balancing under the NGA."[186]

The SCC, SCN, and SCM provide far greater context for a proposed project's GHG emissions than the Commission's historical approach of doing literally nothing to consider the real significance of a project's emissions. By refusing to take a "hard look" at the significance of GHG emissions, the Commission has historically treated GHGs as categorically insignificant without ever truly assessing their significance.[187] By categorically ignoring GHG significance on the project-level, where the NEPA analysis occurs, every individual project's impact on climate change is treated as **zero**. This is impermissible under NEPA.[188]

> *Question C4(b): Should significance criteria be based on a specific fraction of existing carbon budgets in international agreements; state or regional targets; a specific fraction of natural carbon sinks; or other metrics? If so, how and why would that basis be appropriate*? *Alternatively, should the Commission focus its analysis on GHG emission impacts on global climate metrics (e.g., CO2 levels, ocean acidification, sea level rise) or regional impacts (e.g., snowpack, storm events, local temperature changes)? If so, how and why would that basis be appropriate*?

ANSWER: The Commission "must [] remember [] that the basic thrust of an agency's responsibilities under NEPA is to predict the environmental effects of proposed action before the action is taken and those effects fully known."[189] In doing so, the Commission needs to consider the full range of environmental effects caused by approval of a project. The Commission should

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of the mine expansion while failing to account for the costs, even though the social cost of carbon protocol was available to do so).

[186] *Fla. Se. Connection, LLC*, 162 FERC ¶ 61,233 (2018), Comm'r Glick, dissenting, at p.8.

[187] *Birckhead,* 925 F.3d at 519.

[188] *Ctr. for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1200 (9th Cir. 2008) (there is a range of cost figures for GHGs but **the value of these emissions is "certainly not zero."**) (emphasis added).

[189] *Methow Valley Citizens Council v. Regional Forester*, 833 F.2d 810, 816-817 (9th Cir. 1987), *rev'd on other grounds*, *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989) (internal citations omitted).

not base its significance assessment solely upon one metric, but rather a holistic review of how a proposed project's short- and long-term impacts weigh against any benefits of construction. This would include analysis of GHG emission impacts on global climate metrics as well as how those emissions volumes fit with scientific carbon budgets, goals in international agreements on decarbonization, state and regional targets, alongside a calculation of the social cost of GHG emissions.[190] Additionally, the Commission should weigh the harms of growth-inducing effects, such as whether construction would expand use of fossil fuels at a time when the IPCC and USGCRP findings require a rapid decarbonization of the energy system to preserve climatological stability for present and future generations.[191]

In line with the 2018 Special Report on Global Warming of 1.5°C by the IPCC,[192] the Mercator Research Institute on Global Commons and Climate Change estimates that the global CO2 budget associated with 1.5°C of warming will be exhausted by 2028 if emissions remain at the pre-pandemic levels of the late 2010s.[193] Such a short timeline requires bold action from federal decisionmakers to avert severe societal disruption. Put simply, a "business as usual" approach to fossil fuel infrastructure permitting will condemn humanity to a degraded future—an outcome wholly not in the public interest. Beyond a 1.5°C temperature rise, the risk of long-

[190] The separate comment submitted by Natural Resources Defense Council on the instant docket outlines one approach determining significance based on the U.S. carbon budget.

[191] IPCC, *Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by government* (Oct. 8, 2018), https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/; USGCRP (2018) *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II.*

[192] *Id.*

[193] Mercator Research Institute on Global Commons and Climate Change, *That's how fast the carbon clock is ticking*, https://www.mcc-berlin.net/en/research/co2-budget.html (last accessed May 19, 2021).

lasting and irreversible consequences of climate change increases.[194] This would threaten global stability, food security, and the livelihoods of present and future generations[195]—effects of climate change that the Commission is required to consider when determining whether or not to permit additional fossil fuel infrastructure.[196] Given this stark science, any permitting decision should include a determination that the project is consistent with a broader program that will reduce national emissions to stay within the 1.5°C budget.

Additionally, analysis that compares project emissions to state, national, or global totals, while potentially useful (particularly with respect to state climate targets), is inadequate for determining the significance of the emissions released by a particular project. In its recent *Northern Natural* certificate order, the Commission continued to base its significance determination on such comparisons.[197] The problem with using volumes alone is that, without proper context, volumes like 60 million metric tons of carbon dioxide, which is tremendous, will be misinterpreted by FERC and the public as effectively zero because that accounts for less than one percent of national emissions. The Commission conceded this in the 2018 NOI, explaining that "calculating a proposed project's emissions as a percentage of sector, nationwide, or global emissions" will "[g]enerally" be "too low to be considered meaningful because project emissions

[194] IPCC, *Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by government*, Oct. 8, 2018, https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/

[195] David Spratt and Ian Dunlop, *Existential climate-related security risk: A scenario approach*, BREAKTHROUGH – NATIONAL CENTRE FOR CLIMATE RESTORATION (May 2019), *available at* https://www.breakthroughonline.org.au/papers; National Intelligence Council, *Global Trends 2040: A More Contested World* (Mar, 2021), at pp. 30-41, *available at* https://www.dni.gov/files/ODNI/documents/assessments/GlobalTrends_2040.pdf.

[196] NEPA requires agencies to analyze "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity." 42 U.S.C. § 4332(C)(iv).

[197] *N. Nat. Gas Co.*, 174 FERC ¶ 61,189, at P 34 (2021).

would be miniscule compared to nationwide or global emissions."[198] As one federal district court recently noted, "framing sources as less than 1% of global emissions is dishonest and a prescription for climate disaster."[199] Accordingly, "[m]ere quantification [of GHGs] is insufficient" under NEPA.[200]

In a nation the produces over 6.5 billion tons of annual GHG emissions annually, it is far too easy to make highly significant emissions volumes appear irrelevant without adequate context. By applying the Social Cost of Greenhouse Gases, decisionmakers and the public can readily comprehend that, for example, 22 million tons of carbon dioxide equivalent will generate over $1 billion in climate damages.[201]

Question C4(c): What would be an appropriate GHG climate model for use on a project-level basis?

ANSWER: As an initial matter, while the Commission has historically required an impossible standard ("universally accepted") for GHG climate modeling methodologies, Chairman Glick has recognized that "[t]he refusal to assess the significance of [a] Project's contribution to the harm caused by climate change is what allows the Commission to state that approval of [a] Project 'would not constitute a major federal action significantly affecting the quality of the human environment' and, as a result, conclude that the Project is in the public interest and required by the public convenience and necessity."[202]

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[198] 2018 NOI at P 46.

[199] *California v. Bernhardt*, 472 F. Supp. 3d 573, 623 (N.D. Cal 2020), *appeal filed*, 9th Cir Case No. 20-16801.

[200] *Id.*

[201] IPI Report at 33.

[202] *Tenn. Gas Pipeline Co., L.L.C.*, 169 FERC ¶ 61,230 (2019), Comm'r Glick, dissenting in part, at p.1. As outlined in its separate comment, Natural Resources Defense Council has developed its own climate test that is explicitly designed to assess the consistency of individual fossil fuel projects within a 1.5° C limited world.

Additionally, the SCC, SCN, and SCM can and should be employed on the project-level. While one methodology among many, the SCC is the leading available tool to assess climate impacts. Federal agencies regularly apply the SCC to assess climate impacts in cost-benefit analyses not dissimilar from the Commission's.[203] Agencies have applied the tool in regulatory cost-benefit analyses dozens of times under both the Obama and Trump administrations, including EPA, DOE, the National Highway Traffic Safety Administration, and the Bureau of Land Management.[204] At least 13 states also use the SCC.[205]

Agencies have also, on occasion, used scientific models to project actual physical effects from volumetric emissions calculations, such as temperature or sea-level rise.[206] While this approach is rarely used and lacks the context that the SCC provides, it is at least an available tool that the Commission could apply. The Commission could also employ models to project actual physical effects by using the underlying SCC integrated assessment models to determine physical effects; however, the Commission should monetize these impacts, too.

> *Question C4(d): Is there any level of GHG emissions that would constitute a de minimis impact? If so, how much and why would such number be appropriate? How would such analysis meaningfully inform the Commission's decision making*?

ANSWER: The Commission cannot label any GHG emissions *de minimis* until it first conducts a cumulative and programmatic analysis of its program of permitting fossil fuel infrastructure. As Chief Judge Wald presciently explained three decades ago: "[W]e cannot

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[203] The Commission itself has recognized as much. *See Mountain Valley Pipeline, LLC*, 163 FERC ¶ 61,197, at P 281 (2018).

[204] IPI Report at 33.

[205] *The Cost of Carbon Pollution: States Using the SCC*, NYU INST. FOR POLICY INTEGRITY, https://costofcarbon.org/states (last accessed May 19, 2021).

[206] *E.g.*, NHSTA, *Environmental Impact Statement for CAFE Standards, 2017-2025*, July 2012, at S-49 https://www.nhtsa.gov/corporate-average-fuel-economy/environmental-impact-statement-cafe-standards-2017-2025.

afford to ignore even modest contributions to global warming. If global warming is the result of the cumulative contributions of myriad sources, any one modest in itself, is there not a danger of losing the forest by closing our eyes to the felling of the individual trees?"[207] Thus, before the Commission can dismiss any GHG emissions, it must conduct a programmatic analysis of the cumulative impacts of its program of approving fossil fuel infrastructure.[208]

De minimis emissions would be any that are a result of emissions released in leak detection and repair for gas infrastructure that reduces the overall GHG emissions of existing lines. *De minimis* impacts would also include any effects resulting from incidental GHG emissions released during decommissioning activities where additional construction or new infrastructure are not installed. Installation of new gas infrastructure, including replacement equipment that expands capacity or increases atmospheric GHGs would not result in *de minimis* impacts, because these actions extend the lifespan of fossil fuel infrastructure and increases capacity volumes.

> *Question C5: As part of the Commission's public interest determination, how would the Commission weigh a proposed project's adverse impacts against favorable impacts to determine whether the proposed project is required by the public convenience and necessity and still provide regulatory certainty to stakeholders?*

ANSWER: Under the NGA, the Commission must only approve projects that are needed to meet a verifiable market demand. As such, the Commission must ensure that only projects whose need must be met by building more gas pipelines are approved. This is particularly important given the scale of the climate crisis; projects that worsen the climate crisis are not needed. Accordingly, the Commission must consider whether non-gas alternatives (i.e., demand

[207] *City of Los Angeles v. NHTSA*, 912 F.2d 478, 501 (D.C. Cir. 1990) (Wald, C.J., dissenting), *overruled on other grounds by Fla. Audubon Soc. v. Bentsen*, 94 F.3d 658 (D.C. Cir. 1996).

[208] *E.g.*, *California v. Bernhardt*, 472 F. Supp. 3d 573, 625 (N.D. Cal 2020), *appeal filed*, 9th Cir Case No. 20-16801; 40 C.F.R. § 1508.18 (1978).

response, energy efficiency, etc.) could address the intended underlying use for the gas. Only after a thorough and detailed determination that no alternatives are feasible should the Commission weigh the adverse and favorable impacts of the proposed gas project.

Furthermore, given that the Commission must "evaluate all factors bearing on the public interest"[209]—and there is perhaps no factor more pertinent to the public interest than the scale of the climate crisis—the Commission should heavily weight a project's long-term climate impacts in its public interest analysis. These long-term climate impacts should be given greater weight than, for example, short-term economic benefits.

Additionally, the Commission must cease concluding, with little supporting evidence, that an applicant's proposed mitigation measures will reduce a project's adverse environmental impacts below the significance threshold. The Commission rarely examines the proposed mitigation measures in detail and often fails to explain or substantiate its assumption that the measures will be effective. Often, the mitigation measures the applicant puts forward are high-level best practices that offer no specific details on how compliance will be achieved.

> *Question C6: Does the NGA, NEPA, or other federal statute authorize or mandate the use of Social Cost of Carbon (SCC) analysis by the Commission in its consideration of certificate applications? If so, how does the statute direct or authorize the Commission to use SCC? Does the statute set forth specific metrics or quantitative analyses that the Commission must or may use and/or specific findings of fact the Commission must or may make with regard to SCC analysis of a certificate application? Does the statute set forth specific remedies the Commission must or may implement based on specific SCC findings of fact?*

ANSWER: NEPA requires agencies to "identify and develop methods and procedures, in consultation with the [CEQ] … which will ensure that presently unquantified environmental

[209] *Mo. Public Serv. Comm'n v. FERC*, 234 F.3d 36, 38 (D.C. Cir. 2000) (quoting *Atl. Ref. Co. of N.Y. v. Pub. Serv. Comm'n Atl. Refining Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 391 (1959)).

amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations."[210] The SCC, or a similar methodology that allows climate impacts to be "considered on an equal basis with other, more traditional concerns[,]"[211] is necessary to accomplish this mandate with respect to NEPA analysis of fossil fuel infrastructure.

While NEPA requires the Commission to ensure "the scientific integrity [] of the discussions and analyses in [NEPA documents]"[212] neither NEPA nor the NGA explicitly reference the SCC because these statutes pre-date recent developments in climate science. However, there is nothing within the NGA, NEPA, or other federal statutes that would prohibit the use of SCC when evaluating certificate applications or conducting a NEPA significance determination. Under D.C. Circuit precedent, the Commission must assess the significance of a project's impacts; nevertheless, the Commission's current policy is to not employ **any** meaningful analytical tools and, as such, the Commission frequently fails to comply with its statutory duties under NEPA and consequently the NGA's requirements for informed decisionmaking.[213] Other federal agencies employ these tools[214] and the SCC has been endorsed by the National Academy of Sciences.[215] The U.S. Government Accountability Office supports

[210] 42 U.S.C. § 4332(2)(B).

[211] *Found. for N. Am. Wild Sheep v. U.S. Dep't of Agric.*, 681 F.2d 1172, 1177 (9th Cir. 1982).

[212] 40 C.F.R. § 1502.24, *accord* 40 C.F.R. § 1500.1(b) (requiring "accurate scientific analysis").

[213] *Sabal Trail*, 867 F.3d 1357 (D.C. Cir. 2017).

[214] Peter Howard and Jason Schwartz, *Think Global: International Reciprocity as Justification for a Global Social Cost of Carbon*, 42 COLUM. J. ENV'T L. 203, 270– 84 (2017) (listing all uses by federal agencies through mid-2016).

[215] See Nat'l Acads. of Scis., Eng'g & Med., *Valuing Climate Damages: Updating Estimates of the Social Cost of Carbon Dioxide* 3 (2017); Assessment of Approaches to Updating the Social Cost of Carbon: Phase 1 Report on a Near-Term Update 1 (2016). Both available at https://www.nap.edu/catalog/24651/valuing-climate-damagesupdating-estimation-of-the-social-cost-of.

those recommendations and endorsed the use of the SCC in agency decisionmaking.[216] Moreover, the White House has directed agencies to employ SCC metrics for cost-benefit and other regulatory analysis similar to the Commission's review of certificate applications.[217]

Question C7(a): If the Commission chooses to use the SCC tool, how could it be used to determine whether a proposed project is required by the public convenience and necessity? How could the Commission use the SCC tool in the weighing of the costs versus benefits of a proposed project?

ANSWER: The SCC tools can be used to provide a robust picture of the environmental effects, as well as the monetized harms, of a project such that the Commission may make a more informed determination about what is truly in the public interest. While SCC models do not capture all of the harms associated with climate change, monetizing climate impacts provides the public and decisionmakers with accessible figures useful in determining whether a project's impacts on climate render the project not in the public interest. Monetized estimates of impacts also allow the Commission to easily compare at least some of a project's harms to its potential economic benefits, whereas other metrics can misleadingly minimize climate impacts due to inadequate contextualization. This would allow the Commission to informedly "balanc[e] the evidence of public benefits to be achieved against the residual adverse effects" as part of the certification assessment.[218] If the impacts do not exceed the project's benefits after monetizing the project's contribution to climate change and other monetized economic, environmental, and health effects, the Commission should then consider whether other monetized aspects of the project (e.g., monetized costs of construction, operation, and eminent domain) and any

[216] U.S. Gov't Accountability Office, *Social Cost of Carbon* (2020), *available at* https://www.gao.gov/assets/710/707776.pdf.

[217] *See generally* EO 13990.

[218] *Rio Grande LNG, LLC*, 169 FERC ¶ 61,131, at P 28 (2019) ("[I]n deciding whether to authorize the construction of major new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences.").

significant but non-monetized climate, health, environmental, and social effects still make the project net harmful.

Question C7(b): How could the Commission determine the appropriate discount rate to use? Should the Commission consider multiple discount rates or one discount rate? Please provide support for each option.

ANSWER: The Commission has previously relied upon *EarthReports v. FERC*[219] to justify its decision to forego use of the SCC metrics and ultimately ignore climate impacts. However, the landscape has changed since the court deferred to the arguments the agency made in that case.[220] One of the Commission's main arguments in *EarthReports* was that there was a lack of consensus on the appropriate discount rate. In the intervening years, the federal government and new literature show a growing scientific consensus effectively endorsing a consumption-based discount rate around 3 percent or lower.[221] Thus, there is no meaningfully relevant lack of consensus on the discount rate anymore, to the extent there ever was.[222] Given that now the SCC **is** the "standard methodology" for calculating GHG significance, the holding of *EarthReports* is no longer applicable.

Question C7(c): How could the Commission acquire complete information to appropriately quantify all of the monetized costs/negative impacts and monetized benefits of a proposed project?

ANSWER: See *supra* at Question C3(a)-(b).

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[219] 828 F.3d 949 (D.C. Cir. 2016).

[220] For example, the D.C. Circuit itself questioned whether *EarthReports* "still holds." *Sabal Trail*, 867 F.3d at 1375.

[221] Interagency Working Group on Social Cost of Greenhouse Gases, *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990* (Feb. 2021), https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf.

[222] Even with a lack of consensus, the Commission could have provided a range. *See Mountain Valley Pipeline, LLC*, 163 FERC ¶ 61,197, at P 294 (2018) (acknowledging that the Commission could have provided a range but dismissing its inclusion as "arbitrary.").

Question C7(d): Should the Commission use the tool to determine whether a project has significant effects on climate? If so, how could the Commission connect the SCC estimate with the actual effects of the project? What level of cost would be significant and why?

ANSWER: The SCC framework calculates impacts on a variety of physical systems as part of its methodology; those impacts are then priced accordingly. As such, the SCC already fully estimates the actual effects of a project. Additionally, significance, per NEPA, is a determination based upon a consideration of a number of factors with SCC metrics being but one. The Commission must make a holistic consideration of the geographic, biophysical, and social context in which the effects will occur, as well as the intensity of the impacts on public health and safety. This consideration should include potential adverse effects on any endangered or threatened species or on critical habitat.

Moreover, while the SCC may be sufficient to demonstrate significant climate effects on its own, reliance upon this metric alone to determine project significance under NEPA may not be sufficient. If the calculation of climate effects through use of the SCC is inconclusive, it does not mean that there is no significant impact under NEPA because of the many other issues considered in a robust NEPA analysis (e.g., endangered species impact, water quality impacts, non-GHG air pollutant emissions). For the purposes of NEPA, the relevant question is not whether there are "significant effects on climate" but whether there are impacts on the "human environment," which is significantly broader.

Question C8: Are there alternatives to the SCC tool that the Commission should consider using? If so, how could the Commission use those tools?

ANSWER: At the outset, as noted elsewhere in these comments, to the extent that there is a "standard methodology" regarding climate emissions today, the SCC tool is it; accordingly, the Commission should regularly incorporate an SCC assessment in its reviews. However, there are a variety of other tools available for the Commission's additional consideration or adaptation.

Notably, the use of carbon budgeting is a tool that the Commission could use—not as an alternative to the SCC—but in tandem with it. The value of carbon budgeting is that it provides an absolute measure of the significance of an individual proposed action under consideration by the Commission in the context of the global climate crisis. By way of context, the October 2018 IPCC *Global Warming of 1.5°C* special report provided a revised carbon budget for a 66 percent probability of limiting warming to 1.5°C, estimated at 420 $GtCO_2$ and 570 $GtCO_2$ depending on the temperature dataset used, from January 2018 onwards.[223] Compared with the average global emissions rate of 36 $GtCO_2$ per year noted above for 2012-2014, the IPCC explained the global emissions rate has increased to 42 $GtCO_2$ per year. [224] At this rate, the global carbon budget would be expended in just 7 to 11 years, underscoring the urgent need for transformative global action to transition from fossil fuel use to clean energy.[225] In effect, we are burning through our carbon budget at a rapid pace and thereby limiting the flexibility future generations may require or desire as they intensify our world's transition away from fossil fuels.

To put these global carbon budgets in the specific context of domestic U.S. emissions and the U.S.' obligation to reduce emissions, the U.S. is the world's largest historic emitter of GHG pollution, responsible for 26 percent of cumulative global CO_2 emissions since 1870, and is currently the world's second highest emitter on an annual and per capita basis.[226] Because of this, it is essential that the Commission use carbon budgeting as an additional means to determine the compatibility of a given action with the U.S.' goal of limiting warming to 1.5°C. To achieve this goal, global emissions must be reduced by half over the next decade. Accordingly, it is in the

[223] *See* IPCC, *Fifth Assessment Report Climate Change 2013* at 8–58.

[224] *Id.*

[225] *Id.*

[226] Global Carbon Atlas, CO2 Emissions, "Time Series" & "Chart View," http://www.globalcarbonatlas.org/en/CO2-emissions (last visited July 19, 2019).

national interest for the U.S., based on our cumulative emissions and respective capabilities, to lead the way by reducing GHGs by at least 50 percent (and ideally 70 percent) by 2030—and to near zero by 2040. In order to do so, carbon budgeting—along with the SCC protocol—must be applied to proposed actions to determine their compatibility with both the Paris climate targets and the overall goal of limiting warming to 1.5°C.

Other devices that the Commission may employ in tandem with the use of both the SCC and carbon budgeting include various tools used by other U.S. government agencies;[227] tools used by the World Bank;[228] and tools developed by private organizations and companies.[229] Further, as referenced above, the Commission should re-incorporate consideration of the Paris climate accord.[230] Were the Commission so inclined, it could also incorporate a combination of these existing tools into its analysis, or it could work to develop its own. What the Commission can no longer do is continue to refuse to adopt **any** assessment tool altogether.

> *Question C9: How could the Commission determine whether a proposed project's GHG emissions are offset by reduced GHG emissions resulting from the project's operations (e.g., displacing a more carbon-intensive fuel source such as coal or fuel oil)?*

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[227] "Greenhouse Gas (GHG) Accounting Tools," NEPA.GOV, https://ceq.doe.gov/guidance/ghg-accounting-tools.html (last accessed May 20, 2021); "DoD Climate Assessment Tool," DOD, https://media.defense.gov/2021/Apr/05/2002614579/-1/-1/0/DOD-CLIMATE-ASSESSMENT-TOOL.PDF (last accessed May 20, 2021).

[228] "World Bank Climate and Disaster Risk Screening Tools," WORLD BANK, https://climatescreeningtools.worldbank.org/ (last accessed May 20, 2021).

[229] *E.g.*, "Calculation Tools," GREENHOUSE GAS PROTOCOL, https://ghgprotocol.org/calculation-tools (last accessed May 20, 2021). NRDC has, in its individual capacity, offered further thoughts on development of a climate test in separate comments filed on the instant docket.

[230] *Compare Venture Global Calcasieu Pass, LLC*, 166 FERC ¶ 61,144, at P 112 & n.175 (2019) (rejecting the use of the Paris climate accord given the previous administration's pending withdrawal) *with* News Release, "Paris Climate Agreement," WHITEHOUSE.GOV, https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/ (last accessed May 20, 2021).

ANSWER: Of course, "[a]ll the natural gas that will travel through these pipelines will be going somewhere…."[231] To comply with its statutory obligations, the Commission must consider the quantity and destination of the gas that a proposed project would transport.[232]

Sometimes, that destination is relatively straightforward. For example, for the Southeast Market Pipelines project (Sabal Trail), the gas was being transported "to power plants in Florida, some of which already exist[ed], others of which [were] in the planning stages."[233] But as the D.C. Circuit has concluded, "the mere possibility that a project's overall emissions calculation will be favorable because of an 'offset ... elsewhere' does not 'excuse[ ]' the Commission 'from making emissions estimates' in the first place."[234]

In some such cases, the Commission has attempted to calculate "the gross total minus the offset from coal-fired generating facility retirements."[235] For example, in its Supplemental Environmental Impact Statement for Sabal Trail (on remand), the Commission discussed the power plants identified as end-use consumers of the project's gas volumes and, *inter alia*, "provide[d] the known reductions in GHG emissions resulting from the projected retirement and displacement of coal or oil as a primary fuel."[236]

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[231] *Sabal Trail*, 86 F.3d 1357, 1371 (D.C. Cir. 2017).

[232] *See* IPI Report, at 20 ("Information on expected pipeline capacity and throughput, the source of the natural gas, and its expected end use is highly relevant to FERC's NEPA analysis as well as to its determination as to whether approving a pipeline is in the public interest pursuant to the Natural Gas Act.").

[233] *Sabal Trail*, 867 F.3d at 1371. The Commission "acknowledge[d] that only 'portions' of the pipelines' capacity [would] be employed to reduce coal consumption." *Id*. at 1375.

[234] *Birckhead*, 925 F.3d at 518–19. *See also Sabal Trail*, 867 F.3d at 1375 (where decisionmaker and public are left in the dark as to degree of net change in emissions, the Environmental Impact Statement "fails to fulfill its primary purpose").

[235] *Dominion Transmission, Inc*., 163 FERC ¶ 61,128 (2018), Comm'r LaFleur, dissenting in part, at p.4 n.9.

[236] "Southeast Market Pipelines Project Final Supplemental Environmental Impact Statement," Accession No. 20180205-3021, Docket Nos. CP14-554-002, CP15-16-003, CP15-17-002, at (Feb. 2018), at 4 (footnote omitted).

But as the *Sabal Trail* petitioners pointed out, there were major deficiencies in the Commission's methodology.[237] These deficiencies highlight the errors that the Commission must avoid in future analyses with regard to displacement of both coal/fuel oil and other gas. For example, the Commission failed to demonstrate that retirement of other fossil fuel sources would be caused by, or would not occur without, the pipeline project.[238] Nor did the Commission provide a basis for concluding that, even if coal retirements were contingent on replacement with additional generation, that this generation must be new gas facilities.[239]

The Commission must account for these complexities rather than assuming it can simply calculate "net" emissions by subtracting emissions from the "displaced" coal or fuel oil.[240] As explained by the Institute for Policy Integrity,

> If the increased consumption of gas due to the increased supply from the transportation project displaces dirtier energy sources like coal, the net effect may be a decrease in greenhouse gas emissions; but if increased consumption of gas comes at the expense of energy conservation or of cleaner energy sources like renewables, the end result would be an increase in greenhouse gas emissions. The overall effect may vary with time, as the relative fuel mix of energy substitutes in the market changes. In the near term, gas may be somewhat more likely to displace coal; but in the longer term, as renewables continue to become price-competitive and increase their market share, gas competition against renewables may become

[237] *See, e.g.*, "Comments on September 27, 2017 Draft Supplemental EIS," Accession No. 20171120-5170, Docket Nos. CP14-552-002, CP15-16-003, CP15-17-002, at 3–9 (hereinafter DSEIS Comment); "Request for Rehearing, Rescission of Certificates, and Motion for Stay of Order on Remand Reinstating Certificate and Abandonment Authorization," Accession No. 20180413-5296, Docket Nos. CP14-552-002, CP15-16-003, CP15-7-002, at 9–11.

[238] DSEIS Comment at 6.

[239] *Id*. at 7. *See also* IPI Report at 30 ("[I]t is not clear that coal plant retirements can always be attributed wholly to the approval of a single pipeline, and it is not clear that the coal plant's retirement would be the only effect in the energy market. For example, the net potential-to-emit analysis does not seem to consider near-term or long-term effects of gas displacing renewable energy or energy conservation.").

[240] The Commission also must consider the full lifecycle emissions of gas that would be transported by a proposed pipeline, as focusing solely on downstream emissions ignores major sources of GHG pollution, including methane emissions from gas production and transmission.

> increasingly the norm. Forecasting and balancing out all these mixed environmental consequences requires a sophisticated model.[241]

The Commission also must avoid assuming "perfect substitution" of other gas sources.[242] In the Sabal Trail Supplemental Environmental Impact Statement, for example, the Commission improperly excluded emissions from an existing gas-fired power plant on the ground that "the project will only serve to provide the existing natural gas-fired plant with access to alternative sources of natural gas," such that the plant's "potential-to-emit emissions would not change due to the [Sabal Trail] Project."[243] This approach ignores that a new pipeline will cause the production of additional gas, which will result in additional emissions and will have market effects that the Commission must consider.[244]

In other cases, the final destination of the gas is not as clear-cut.[245] In such situations, the Commission cannot simply assert that it "does not know where the gas will ultimately be consumed or what fuels it will displace, and likely neither does the entity over which the Commission has jurisdiction, i.e., the transporting pipeline."[246] As the D.C. Circuit has explained, "[i]t should go without saying that NEPA also requires the Commission to at least

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[241] IPI Report, at 29. *See generally id*. at 29–30 (discussing models to assess substitution effects).

[242] *See Mont. Env't Info. Ctr. v. U.S. Office of Surface Mining*, 274 F. Supp. 3d 1074, 1098 (D. Mont. 2017) (rejecting notion that coal mine expansion would merely displace other coal in the marketplace as "illogical"); *WildEarth Guardians v. BLM*, 870 F.3d 1222, 1236 (10th Cir. 2017) (holding that agency's "perfect substitution assumption . . . is irrational (i.e., contrary to basic supply and demand principles).").

[243] *Fla. Se. Connection, LLC*, 162 FERC ¶ 61,233, at P 22 n.47 (2018).

[244] *See also Transcon. Gas Pipe Line Co., LLC*, 169 FERC ¶ 61,051 (2019), Comm'r Glick, dissenting, at p.6 ("The Commission cannot ignore the fact that adding firm transportation capacity is likely to 'spur demand' for natural gas. Indeed, if a proposed pipeline neither increases the supply of natural gas available to consumers nor decreases the price that those consumers will pay, it is hard to imagine why that pipeline is 'needed' in the first place.") (footnotes omitted).

[245] Regardless of the precise destination, the vast majority—97 percent—of transported gas will be combusted. *See, e.g*., EIA January 2019 Report at 22; *Dominion Transmission, Inc*., 163 FERC ¶ 61,128 (2018), Comm'r LaFleur, dissenting in part, at p.3 ("With respect to downstream impacts, I believe it is reasonably foreseeable, in the vast majority of cases, that the gas being transported by pipelines we authorize will be burned for electric generation or residential, commercial, or industrial end uses.").

[246] *Tenn. Gas Pipeline Co., L.L.C*., 163 FERC ¶ 61,190, at P 62 (2018).

attempt to obtain the information necessary to fulfill its statutory responsibilities."[247] Moreover, "the Natural Gas Act gives FERC explicit authority to establish information collection requirements as part of the certificate application process."[248]

Accordingly, the Commission must "proactively seek and disclose in pipeline proceedings more information regarding both upstream production and downstream end-use."[249] Indeed, "[t]he Commission has several opportunities throughout the pre-filing and formal application processes to issue a data request to the pipeline developer seeking information about the source of the gas to be transported as well as its ultimate end use."[250] As the Commission has acknowledged, "its lack of jurisdiction over shippers, distributors, and end users 'doesn't preclude or foreclose' it from further developing the record by requesting additional data from the project applicant."[251] Accordingly, in *Birckhead v. FERC*, the D.C. Circuit was rightfully skeptical "of any suggestion that a project applicant would be unwilling or unable to obtain it if the Commission were to ask for such data as part of the certificate application process."[252]

[247] *Birckhead*, 925 F.3d at 520. *See also Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1310 (D.C. Cir. 2014) ("While the statute does not demand forecasting that is not meaningfully possible, an agency must fulfill its duties to the fullest extent possible." (internal quotation marks omitted)); *Barnes v. U.S. Dep't of Transp.*, 655 F.3d 1124, 1136 (9th Cir. 2011) ("While foreseeing the unforeseeable is not required, an agency must use its best efforts to find out all that it reasonably can." (internal quotation marks omitted)).

[248] IPI Report at 21. *See also* 15 U.S.C. § 717f(d); 40 C.F.R. § 1502.21.

[249] *Dominion Transmission, Inc*., 163 FERC ¶ 61,128 (2018), Comm'r LaFleur, dissenting in part, at p.6.

[250] *Dominion Transmission, Inc*., 163 FERC ¶ 61,128 (2018), Comm'r Glick, dissenting in part, at p.3.

[251] *Birckhead*, 925 F.3d at 520 (quoting oral argument).

[252] *Id.* "[C]ourts have upheld FERC's rejection of certificate applications on the basis that insufficient information was provided by the applicant to judge whether the project was required by the public convenience and necessity, including based on the lack of information that the applicant would have been required to obtain from a downstream counterparty." IPI Report at 22 (citing *Altamont Gas Transmission Co. v. FERC*, 965 F.2d 1098 (D.C. Cir. 1992) (upholding the Commission's denial of a certificate application because it did not show the availability of downstream facilities adequate to carry new load)).

Gathering this information would allow the Commission to make "educated assumptions" about the fate of the gas, and whether it would be displacing a different fuel source.[253] In other words, even in the presence of uncertainty regarding displacement, FERC must thoroughly evaluate downstream emissions. The "effects of assumptions on estimates can be checked by disclosing those assumptions so readers can take the resulting estimates with the appropriate amount of salt."[254]

Moreover, as Chairman Glick has explained, even where exact information regarding the ultimate end use of the gas is not discernible,

> the Commission will often be able to produce comparably useful information based on reasonable forecasts of the greenhouse gas emissions associated with production and consumption. Forecasting environmental impacts is a regular component of NEPA reviews and a reasonable estimate may inform the federal decisionmaking process even where the agency is not completely confident in the results of its forecast…. Adding capacity has the potential to "spur demand" and, for that reason, an agency conducting a NEPA review must, at the very least, examine the effects that an expansion of pipeline capacity might have on production and consumption.[255]

Courts have recognized that agencies need to rationally analyze demand effects and substitution patterns in NEPA reviews for projects that increase fossil fuel supply.[256] Models exist to forecast how changes to cost inputs (e.g., new fossil fuel transportation projects) affect supply and demand for substitute energy sources, including energy efficiency and

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[253] *Sabal Trail*, 867 F.3d at 1374. *See also Ctr. for Biological Diversity v. BLM*, 937 F. Supp. 2d 1140, 1159 (N.D. Cal. 2013) (NEPA requires further collection of data where doing so would resolve uncertainty or prevent speculation on potential effects); *Scientists' Inst. for Pub. Info. v. Atomic Energy Comm'n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973).

[254] *Sabal Trail*, 867 F.3d at 1374.

[255] *Dominion Transmission, Inc*., 163 FERC ¶ 61,128 (2018), Comm'r Glick, dissenting in part, at pp.4–5.

[256] *See, e.g*., *WildEarth Guardians v. BLM*, 870 F.3d 1222, 1235-36 (10th Cir. 2017); *Mid States Coal. for Progress v. Surface Transp. Bd*., 345 F.3d 520, 549 (8th Cir. 2004); *Mont. Env't. Info. Ctr. v. U.S. Office of Surface Mining*, 274 F. Supp. 3d 1074, 1098 (D. Mont. 2017).

conservation.[257] These models do not require precise specification of the end use of the transported gas.

The Energy Information Administration's National Energy Modeling System (NEMS), for example, is an energy-economy model that projects future energy prices, supply, and demand and can be used to isolate variables such as changes in fuel supply and variations in delivered fuel price. NEMS uses input data from all sectors of the energy economy to forecast national energy supply and demand balance for varying sets of regulatory and fuel price scenarios. As noted by the Surface Transportation Board, which used NEMS to evaluate the market effects of a proposal to build a coal rail line, NEMS "not only forecasts coal supply and demand but also quantifies environmental impacts."[258]

Similarly, EPA has used ICF International's Integrated Planning Model (IPM) to evaluate market responses to various policy proposals since at least 2004. According to ICF, its model uses a linear optimization framework and can be used to evaluate changes in wholesale power dispatch that consider system reliability, environmental constraints, fuel choice, transmission, and capacity expansion. ICF has been used to evaluate the market and environmental impacts of several high-profile proposals related to the extraction and transportation of fossil fuels, including the U.S. State Department's review of the Keystone XL tar sands pipeline, the Surface

[257] *See, e.g.*, *Ctr. for Sustainable Economy v. Jewell*, 779 F.3d 588, 609 (D.C. Cir. 2015) (praising agency's "economic model" to assess substitution effects); *Mid States Coal. for Progress v. Surface Transp. Bd,* 345 F.3d 520, 550 (8th Cir. 2003) (noting the availability of "computer models that are widely used" to "forecast the effects of [a] project on the consumption" of energy sources).

[258] *Mayo Found. v. Surface Transp. Bd*., 472 F.3d 545, 555 (8th Cir. 2006). *See also* IPI Report at 30 (noting that the Bureau of Ocean Energy Management (BOEM) "has used some inputs from NEMS to develop its own model, MarketSim, which simplifies the details and focuses on oil and gas"); BOEM, *The Revised Market Simulation Model (MarketSim): Model Description* 2 (2012) ("MarketSim's economics-based model representation of U.S. energy markets . . . simulates end-use domestic consumption of oil, natural gas, coal and electricity in four sectors (residential, commercial, industrial and transportation); primary energy production; and the transformation of primary energy into electricity.").

Transportation Board's evaluation of the proposed Tongue River Railroad, EPA's evaluation of the Clean Power Plan, the U.S. Forest Service's supplemental evaluation of a proposed coal mining loophole for the Colorado Roadless Rule, and Washington Department of Ecology's evaluation of the Millennium Bulk coal export terminal.

These models can forecast how a change in supply costs and price for one energy source will affect demand for various substitute energy sources, including the demand for greater energy efficiency and conservation. FERC should analyze the available energy substitution models and utilize its expertise to determine the most appropriate model for proposed projects that require such analysis. And in the absence of such modeling for those projects, "the default assumption in lieu of modeling should be that all the natural gas transported by the pipeline is additional into the market, without offsetting any other resource."[259]

> *Question C10: How could the Commission impose GHG emission limits or mitigation to reduce the significance of impacts from a proposed project on climate change? Can the Commission interpret its authority under NGA section 7(e) to permit it to mitigate GHG emissions? If the Commission decides to impose GHG emission limits, how would the Commission determine what limit, if any, is appropriate? Should GHG mitigation be considered only for direct project GHG emissions or should downstream end-use, or upstream emissions also be evaluated? What are the options or methods applicants could propose to mitigate GHG emissions through offsets or other means?*

ANSWER: Under the NGA, "[t]he Commission shall have the power to attach to the issuance of the certificate … reasonable terms and conditions as the public convenience and necessity may require."[260] These conditions help to ensure that only projects that are required by the present or future public convenience and necessity are built.[261] The Commission routinely

[259] IPI Report at 31. This assumption is also "consistent with assumptions that FERC routinely makes to calculate the economic benefits of projects." *Id.*

[260] 15 U.S.C. § 717f(e).

[261] The Commission's mitigation authority is linked to its certification authority. Accordingly, since the Commission must consider "all factors bearing on the public interest" to determine whether to authorize a pipeline project, *Atl. Refining Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 391 (1959), and the courts have explicitly

includes conditions in certificates that are meant to mitigate the environmental risks.[262] The Supreme Court has further held that an environmental review must "contain a detailed discussion of possible mitigation measures" to address adverse environmental impacts.[263] Nevertheless, because the Commission has held that it is incapable of assessing the significance of a pipeline project's direct emissions,[264] and that it will almost always exclude from consideration a pipeline project's indirect emissions,[265] the Commission has not exercised its conditioning authority to impose climate mitigation measures.

The Commission clearly has the authority to impose mitigation measures for all of the reasonably foreseeable direct, indirect and cumulative effects of pipeline projects it approves. There is nothing that differentiates the direct GHG emissions associated with a pipeline project from any other direct impact. With respect to indirect impacts, the core issue has been the Commission's insistence that a project's upstream and downstream emissions are not, in fact,

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outlined that environmental factors are part of that assessment, *Sabal Trail*, 867 F.3d at 1373,. a project's impact on climate is both part of the Commission's overall public interest analysis and its exercise of mitigation measures. *See* Legislative history further supports this interpretation. In 1942, Congress amended the NGA to enable the Federal Power Commission (now FERC) to ability to consider a broader range of factors, including upstream and downstream impacts of pipeline development. H.R. Rep. No. 77-1290, at 3 (1941) (discussing the purpose of the amendment to the NGA that expanded the requirement to obtain a certificate of public convenience and necessity to all new gas infrastructure); *see also* Romany Webb, *Climate Change, FERC, and Natural Gas Pipelines: The Legal Basis for Considering Greenhouse Gas Emissions Under Section 7 of the Natural Gas Act* (June 2019) at 11, 15, SABIN CENTER FOR CLIMATE CHANGE LAW, COLUMBIA LAW SCHOOL, *available at* https://ssrn.com/abstract=3402520.

[262] *E.g., Columbia Gas Transmission Corp.*, 71 FERC ¶ 61,038, 61,158 n.3 (1995) ("The Commission has used the same environmental condition in other proceedings.") (citing *Williams Nat. Gas Co.*, 70 FERC ¶ 61,304 (1995); *Questar Pipeline Co.*, 70 FERC ¶ 61,131 (1995); *Pacific Gas Transmission Co*, 70 FERC ¶ 61,016 (1995)). *See also Jordan Cove Energy Project, L.P., Pacific Connector Gas Pipeline, LP*, 170 FERC ¶ 61,202 (2020), Comm'r Glick, dissenting, at p.12 & n.52 (highlighting that the Environmental Impact Statement "discusses mitigation measures to ensure that the Project's adverse environmental impacts (other than its GHG emissions) are reduced to less-than-significant levels.").

[263] *Robertson v. Methow Valley Citizens*, 490 U.S. 332, 489 (1989).

[264] *E.g., N. Nat. Gas Co.*, 174 FERC ¶ 61,189, at P 29 (2021); *see also Jordan Cove Energy Project, L.P., Pacific Connector Gas Pipeline, LP*, 170 FERC ¶ 61,202 (2020), Comm'r Glick, dissenting, at p.14.

[265] *See generally Dominion Transmission, Inc.*, 163 FERC ¶ 61,128 (2018).

reasonably foreseeable.[266] As discussed above in the answer to Question C.3(a), *supra*, this is wrong. Upstream impacts of gas pipeline installation are reasonably foreseeable, even if the full extent of upstream development is not completely known.[267] Similarly, with respect to downstream emissions, the Commission has been acting upon an improperly narrow reading of *Sabal Trail*,[268] requiring analysis of downstream impacts only in the event of a pipeline directly feeding identified gas-powered generators. As the D.C. Circuit has noted, because FERC is "a 'legally relevant cause' of the direct and indirect environmental effects of pipelines it approves," it must review all foreseeable effects of a project—"even where it lacks jurisdiction over the producer or distributor of the gas transported by the pipeline."[269] The same is true for mitigation. Just because a pipeline developer may not exercise control over upstream drillers or downstream users does not mean that the Commission cannot impose mitigation on the developer for those emissions. Once the Commission has determined the volume of emissions that would be caused directly or indirectly by the project, it can then impose mitigation measures on the project developer to address them.

In designing a mitigation measure, the Commission has broad latitude but must keep the specifics of the project in mind. No one measure will work equally well in all projects. However, it should resist automatically assuming that a project developer's proposed mitigation will satisfactorily address the adverse effects, nor should it assume that money alone sufficiently mitigates a project's GHG emissions. Examples of potential mitigation measures include

[266] *See generally id.*

[267] *Id.*

[268] 867 F.3d 1357 (D.C. Cir. 2017).

[269] *Birckhead*, 925 F.3d at 519.

requiring a project developer to plant trees sufficient to sequester a project's GHG emissions or to build its facilities with monitoring technology to identify methane leaks.

> *Question C11: What categorical exclusions established by other agencies should the Commission consider adopting? Why is it appropriate for the Commission to adopt those categorical exclusions? Should the Commission consider establishing new categorical exclusions that modify the existing categorical exclusions of other agencies? Should the Commission consider adding new categorical exclusions for actions where there is no construction or restoration activities and the environment is not involved? Those actions could include, but are not limited to, modifications to certificated capacity that involve no construction or ground disturbance, modifications to export/import volumes at border crossing facilities if there are no changes to the facilities, rate amendments, NGA section 7(f) service area determinations, conversion of NGA section 7 facilities to section 3 authorizations, limited jurisdiction certificates, etc. Are there other actions that could benefit from a categorical exclusion and would be consistent with the Commission's obligations under NEPA?*

ANSWER: There is no need to expand the number or type of categorical exclusions that allow certain Commission jurisdictional activities to evade environmental review pursuant to an Environmental Impact Statement or an Environmental Assessment. The Commission already has established 36 categorical exclusions through two prior rulemakings issued in 1987 and 2005.[270] Instead, the Commission ought to review its existing categorical exclusions for being overly broad. Indeed, over the years "[c]ategorical exclusions transformed from a narrow procedural mechanism meant to avoid unnecessary paperwork into a gaping hole in the NEPA requirements."[271] The Commission could address this trend "by returning to a more limited concept of the categorical exclusion."[272] At a time when FERC is taking significant action to increase public participation,[273] expanding categorical exclusions would inevitably result in

[270] 18 C.F.R. § 380.4(a).

[271] Kevin H. Moriarty, *Circumventing the National Environmental Policy Act: Agency Abuse of the Categorical Exclusion*, 79 N.Y.U. L. REV. 2312, 2337 (2004).

[272] *Id*.

[273] *See generally* Docket No. AD21-9-000.

"public participation in another sense – through litigation,"[274] which defeats the fundamental purpose of the categorical exclusion and is contrary to FERC's efforts to expand public participation.

Additionally, the Commission should not apply other agencies' categorical exclusions, which have not been evaluated in the context of the Commission's unique statutory authority, to FERC jurisdictional actions. The adoption of new categorical exclusions would "reduce[] accountability and transparency in a NEPA process that is currently not transparent enough."[275] If anything, the Commission should look to other agencies to **expand** its flexibility regarding exceptions to categorical exclusions, and more clearly define the scope and breadth of exceptions to actions that would otherwise be categorically excluded.[276]

CEQ's regulation that defines categorical exclusions states as follows:

> Categorical exclusion means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations (§ 1507.3) and for which, therefore, neither an environmental assessment nor an environmental impact statement is required. An agency may decide in its procedures or otherwise, to prepare environmental assessments for the reasons stated in § 1508.9 even though it is not required to do so. **Any procedures under this section shall provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect**.[277]

While FERC recognizes the definition and requirements of Section 1508.4,[278] Commission regulations specific to categorical exclusions do not define the term "extraordinary

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[274] *Id*.

[275] Bradley C. Karkkainen, *Whither Nepa?*, 12 N.Y.U. ENV'T L.J. 333, 354 (2004).

[276] *See, e.g.*, 23 C.F.R. § 771.117 (Federal Highway Administration).

[277] 40 C.F.R. § 1508.4 (emphasis added).

[278] 18 C.F.R. § 380.4(b) ("In accordance with 40 CFR 1508.4 . . .").

circumstances," nor does the Commission even use it anywhere in its regulations.[279] Instead, "exceptions to categorical exclusions" are described in Section 380.4(b) of FERC's regulations.[280] Specifically, Section 380.4(b) provides:

> In accordance with 40 CFR 1508.4, the Commission and its staff will independently evaluate environmental information supplied in an application and in comments by the public. Where circumstances indicate that an action may be a major Federal action significantly affecting the quality of the human environment, the Commission: (i) May require an environmental report or other additional environmental information, and (ii) Will prepare an environmental assessment or an environmental impact statement.[281]

The regulations then provide a number of examples where such circumstances may exist, including situations where an action will have an effect on: Tribal lands, Wilderness Areas, Wild and Scenic rivers, wetlands, units of the National Park System, National Refuges, or National Fish Hatcheries, anadromous fish or endangered species, or where the environmental effects are uncertain.[282]

It is uncontroversial that enhanced public participation in federal decisionmaking, when done correctly, leads to better results.[283] Therefore, any revision to the categorical exclusion regulations should err on the side of increased public participation. There are several ways in which the Commission could improve the way in which it reviews and processes requests for categorical exclusions. First, the Commission should more clearly align the exceptions for

[279] *See* 18 C.F.R. § 380.4.

[280] 18 C.F.R. § 380.4(b).

[281] 18 C.F.R. § 380.4(b)(1)(i)-(ii).

[282] 18 C.F.R. § 380.4(b)(2).

[283] *See* Thomas Dietz & Paul C. Stern, eds., PANEL ON PUBLIC PARTICIPATION IN ENVIRONMENTAL ASSESSMENT AND DECISION MAKING (National Research Council 2008) ("Benefits of public participation include improving the quality and legitimacy of a decision and improved trust between stakeholders. Public involvement in decisions also helps to directly involve community stakeholders with practical knowledge of the lands or resources in question, which often leads to agencies considering alternatives they may not have otherwise").

categorical exclusions with the language in Section 1508.4. For example, the Commission should clarify that "extraordinary circumstances" could include, but not be limited to, activities that: have or otherwise induce significant impacts on any natural, cultural, recreational, historic or other resource; involve significant air, noise, or water quality impacts; or either individually or cumulatively, have any significant environmental impacts.[284] This would be consistent with the flexible approach adopted by other agencies.[285]

Second, the Commission should provide a clear process for public notice and comment for all Commission jurisdictional projects where project applicants seek a categorical exclusion. The notice should explicitly solicit comments on at least the circumstances described in Section 380.4(b)(2). This would ensure that the public has a clearly defined way to submit input to the Commission regarding whether any of the circumstances described in Section 380.4(b)(2) exist, and therefore necessitate further environmental review. The Commission should also provide additional transparency by clearly outlining where and how a final agency determination on a request for categorical exclusions is codified.

Third, the Commission should clarify and expand the types of situations where further environmental review is required for projects that would otherwise qualify for a categorical exclusion. For example, the Commission should conduct further environmental studies where there is: 1) a substantial controversy on environmental grounds, 2) significant impact on properties protected by Section 4(f) requirements or Section 106 of the National Historic Preservation Act (NHPA), or 3) inconsistencies with any federal, state, or local law, requirement or administrative determination relating to the environmental aspects of the action.[286]

[284] *See, e.g.*, 23 CFR § 771.117(a).

[285] *See id.*

[286] *See id.*

At a time when the Commission is making great efforts to increase the quality and quantity of public participation in Commission proceedings,[287] it would be inconsistent with that objective to simultaneously expand the number and type of categorical exclusions that are expressly designed to reduce public input opportunities.[288]

D. Improvements to the Efficiency of the Commission's Review Process

Question D1: Should certain aspects of the Commission's application review process (i.e., pre-filing, post-filing, and post-order-issuance) be condensed, performed concurrently with other activities, or eliminated, to make the overall process more efficient? If so, what specific changes could the Commission consider implementing?

ANSWER: The overwhelming takeaway from the comments filed on the 2018 NOI is landowners and communities affected by gas infrastructure feel ignored and disrespected. The incredible power imbalance between a project applicant, who is typically represented by sophisticated attorneys who specialize in the FERC process, and a landowner or other affected community member, who has to divert their limited time outside of their regular responsibilities to learn about the Commission process, means that individuals or community groups who wish to challenge a proposed gas project are constantly running to catch up. For example, the Commission's typical imposition of a 21-day initial comment window means that community members, many of whom are just learning about FERC for the first time (let alone the instant project), must learn about an obscure agency, learn about their rights, and outline their initial views on the project, all within a three-week window. It is not surprising, therefore, that

[287] *See* Docket No. AD21-9-000.

[288] Council on Environmental Quality, Final Guidance for Federal Departments and Agencies on Establishing, Applying, and Revising Categorical Exclusions Under the National Environmental Policy Act, 75 Fed. Reg. 75,628 (Dec. 6, 2010) (to be codified at 40 C.F.R. pts. 1500-1508); Robert L. Glicksman et al., Environmental Protection: Law and Policy 239 (6th ed. 2011) (Agencies sometimes regard categorical exclusions "as a way of escaping NEPA entirely").

community filings typically become more sophisticated over time, often causing the Commission to learn about significant landowner or community concerns later in the process.

Government efficiency is important; prioritizing speed over accuracy is not efficient. Were the Commission to adopt the reforms outlined herein, as well as those in the comments filed in 2018, the process would organically become more efficient. Landowner concerns could be incorporated earlier in the process; better consultation with affected communities would more quickly highlight potential concerns with the applicant's chosen route, and deficiencies in the environmental review would be caught earlier. For example, had the Commission robustly engaged with Atlantic Coast Pipeline community-members early in the process, it would have been hard-pressed to conclude that Union Hill was not an environmental justice community.[289] Had the Commission thoroughly understood the gravity of cutting trees on the Holleran family's property, it may have determined that the risks of allowing pre-mature tree felling outweighed any timing concerns raised by the now defunct Constitution pipeline project.[290] Had the Commission invested more resources in learning about the environmental justice communities surrounding the Weymouth Compressor Station, its current review of the safety concerns raised by the station's operation may have been avoided.[291] And had the Commission imposed a robust assessment of need years ago, instead of greenlighting projects based solely on precedent agreements, it may have avoided dozens of lawsuits and preserved valuable Commission

[289] Jeff Gleason, *Environmental Justice Is Not Merely a Box to Be Checked*, N.Y. TIMES (Jan. 23, 2020), https://www.nytimes.com/2020/01/23/opinion/virginia-pipeline.html.

[290] Susan Phillips, *Family that lose hundreds of trees to failed pipeline project settles with company, gets land back*, STATEIMPACT PENNSYLVANIA (July 3, 2020), https://stateimpact.npr.org/pennsylvania/2020/07/03/family-lost-hundreds-of-trees-to-failed-pipeline-project-settles-with-company-gets-land-back/.

[291] News Release, *FERC Establishes Paper Briefing to Examine Weymouth Compressor Station Concerns*, FERC (Feb. 18, 2021), https://www.ferc.gov/news-events/news/ferc-establishes-paper-briefing-examine-weymouth-compressor-station-concerns.

resources. In short, the Commission should focus its efforts on ensuring that its review process is robust and legally sound and that all affected stakeholders are brought into the process as early as possible; afterwards, it can consider how to implement that robust process in the most efficient manner.

Question D4: Are there classes of projects that should appropriately be subject to a more efficient process? What would the most efficient process entail?

ANSWER: This question seems to equate the word "efficient" with "speed." This is incorrect since, as noted in the answer to Question D1, *supra*, an efficient process is one that balances the needs of all affected parties and lessens the chances for unnecessary harm and litigation. Furthermore, there are already mechanisms that adjust the breadth of review depending on project complexity. For example, typically projects subject to an Environmental Assessment complete the Commission review process more quickly than projects that require an Environmental Impact Statement. Similarly, the greater the impact of the project, the more likely that the Commission will have to consult with a variety of other federal agencies to ensure compliance across federal law.

However, to the extent the Commission wishes to fast-track a particular type of certificate proceeding, it may be possible to dispense of decommissioning and abandonment proceedings more quickly, assuming that they are not paired with a replacement project. The Commission must still ensure that the decommissioning or abandonment is reviewed under NEPA and is in compliance with other federal laws, and it should, as noted above, always prioritize accuracy over speed; however, given that these projects typically involve older, less reliable infrastructure, it is highly likely that it would be in the public interest to approve any such project.

E. The Commission's Considerations of Effects on Environmental Justice

Before answering the questions posed by the Commission, we wish to outline for the Commission the method we used to develop these answers. At its core, the best spokespeople for improving environmental justice reviews are the individuals who actually live in environmental justice communities and are directly affected by Commission decisions. Many of the signing organizations are signatories to the *Jemez Principles*.[292] Two of those principles are to let people speak for themselves and to work in solidarity and mutuality across groups. Accordingly, we have attempted to use our resources to encourage as many people as possible to comment on this docket. We call on the Commission to give the greatest weight to recommendations offered by directly affected individuals, organizations that specialize in environmental justice, or organizations that directly represent environmental justice communities.

To help inform our responses, we underwent a robust month-long campaign through community email listservs, social media, and word of mouth. The goal was to ensure that as many potentially interested individuals participated in this process as possible. We also hosted four afternoon and evening listening sessions with environmental justice organizations and community representatives; we then offered an opportunity for further feedback in survey form. Almost 70 organizations and individuals participated in this process in some manner.

These efforts certainly did not reach every interested party, but there were many who expressed appreciation for the opportunity to learn about the certificate review process; many others noted explicitly that they had not received similar outreach from the Commission itself. Relatedly, we heard repeatedly that the Commission must do more to ensure that non-English speaking communities (particularly Spanish and Chinese, both Mandarin and Cantonese) can

[292] *Jemez Principles for Democratic Organizing*, *available at* https://www.ejnet.org/ej/jemez.pdf.

participate in the certificate review process. The appointment of Montina Cole as the Commission's Senior Counsel for Environmental Justice and Equity[293] presents a golden opportunity to begin to engage in robust conversations with environmental justice communities to rectify these concerns and to supplement the comments filed on the instant docket.

Additionally, many of the recommendations we received mirrored those that the Commission received in the Office of Public Participation docket. For example, the lack of clear explanations of what the Commission does, how to become involved, and what steps must be done preserve the right to appeal, are deeply intertwined with ensuring an environmentally just review process. Accordingly, the Commission should review the recommendations offered in that docket, particularly the comments filed by Earthjustice,[294] and consider them equally applicable to its ongoing audit of its environmental justice reviews.

We also wish to highlight the unique considerations with respect to tribes. As the Commission is well-aware, tribal governments and entities have unique interests in the certificate review process, and the Commission has historically had difficulty in outreach and engagement with these communities. While tribes typically are included within the definition of "environmental justice" communities, the legal rights of tribes and tribal governments, particularly in their interactions with the federal government, often are not the same as other environmental justice communities. In particular, there are specific obligations to tribes as governments, and many have unique treaty rights not shared by other public participants or environmental justice communities. The Biden administration has reiterated the need for all

[293] News Release, *Glick Names Montina Cole to Top Environmental Justice Post at FERC*, FERC (May 20, 2021), https://www.ferc.gov/news-events/news/glick-names-montina-cole-top-environmental-justice-post-ferc.

[294] "Comments of Earthjustice," Accession No. 20210423-5251, Docket No. AD21-9-000; "Supplemental Comments of Earthjustice," Accession No. 20210507-5077, Docket No. AD21-9-000.

federal actors to establish "regular, meaningful, and robust consultation with Tribal officials in the development of Federal policies that have Tribal implications."[295] However, tribal representatives have noted "these actions alone are not sufficient to address systemic failures in the various consultation processes across the federal government."[296]

Nevertheless, the questions the Commission has posed regarding its Policy Statement do not include any items or requests that are specific to tribes. Accordingly, we have supplemented our responses to Section E to provide the Commission with suggestions on how it may improve its review process for gas pipelines with respect to tribes. We do not, however, proclaim to speak for or represent any tribes, let alone the diverse views of all tribal nations and peoples. As a first and critical step to developing a Policy Statement that adequately reflect the views and needs of tribal peoples, the Commission must undertake a more extensive effort, including public meetings publicized according to the recommendations of tribal representatives, to solicit more thorough and detailed feedback from tribes themselves.

Question E1: Should the Commission change how it identifies potentially affected environmental justice communities? Why and if so, how? Specifically, what criteria should the Commission consider?

ANSWER: Yes. Environmental justice reviews are intended to account for the fact "that communities of color and the poor are exposed to more pollution, noxious land uses, and environmental risk than are white, wealthier communities," [297] and "that their cultural spaces and

[295] Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships (Jan. 26, 2021), https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/26/memorandum-on-tribal-consultation-and-strengthening-nation-to-nation-relationships/.

[296] *See, e.g.*, "Comment of United South & Eastern Tribes Sovereignty Protection Fund," Accession No. 20210423-5189, Docket No. AD21-9-000.

[297] Eileen Gauna, *LNG Facility Siting and Environmental (In)justice: Is It Time for A National Siting Scheme?*, 2 ENV'T & ENERGY L. & POL'Y J. 85, 86 (2007).

sacred sites are the first to be sacrificed at the altar of runaway development."[298] Environmentally hazardous facilities are often located in environmental justice communities because, traditionally, "these communities – for a variety of reasons – are disadvantaged in the various governmental fora where important environmental decisions are made."[299]

In 1997, CEQ developed guidance to ensure that agencies are identifying and addressing environmental justice issues created by their actions.[300] This guidance instructs agencies to "consider the composition of the affected area, to determine whether minority populations, low-income populations, or Indian tribes are present in the area affected by the proposed action, and, if so, whether there may be disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, or Indian tribes."[301] Agencies also "should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action,"[302] and with respect to Indigenous tribes specifically, should recognize that impacts on "Indian tribes may be different from impacts on the general population due to a community's distinct cultural practices."[303] EPA issued further guidance in both 1998 and 2016; together, these guidance documents help agencies to identify and consider effects on environmental justice communities.[304]

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[298] *Id.*

[299] *Id.*

[300] *See* CEQ, "Environmental Justice, Guidance Under the National Environmental Quality Act" (Dec. 1997), *available at* https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf (hereinafter CEQ Guidance).

[301] *Id.* at 9.

[302] *Id.*

[303] *Id.* at 14.

[304] EPA, "Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis" (Apr. 1998), *available at* https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_epa0498.pdf; EPA, "Technical Guidance for Assessing Environmental Justice in

Ensuring a robust environmental justice review of gas infrastructure is central to the Commission's mission under both the NGA and NEPA, as gas infrastructure frequently raises significant environmental justice concerns, which are relevant to whether a proposed project is required by the public convenience and necessity. First, gas infrastructure poses serious health and safety risks to the communities in which they are located. These threats arise through various forms of pollution from construction and operation of the pipeline, through its accompanying compressor stations, and through the risks of catastrophic explosions. Pipeline infrastructure can affect local air quality and the health outcomes of nearby populations through leaks and emissions. "A growing body of scientific evidence documents leaks of methane, toxic volatile organic compounds and particulate matter throughout [gas] infrastructure."[305] Thirty years of data show that there are approximately 300 significant spills and leaks every year along U.S. oil and gas pipelines.[306] Additionally, the communities closest to pipelines are most at risk from accidents and explosions. "For the 20 years of 1996-2016, [the Pipeline and Hazardous Materials Safety Administration] recorded 858 serious incidents, with 347 fatalities (more than 17 each year) and 1,346 injuries."[307]

Second, gas infrastructure is disproportionately sited in low-income communities or communities of color. For example, "[m]ore than 1 million African Americans live within a half

Regulatory Analysis" (June 2016), *available at* https://www.epa.gov/sites/production/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf.

[305] *Too Dirty, Too Dangerous: Why health professionals reject natural gas*, PHYSICIANS FOR SOCIAL RESPONSIBILITY (2017), at 21, *available at* https://www.psr.org/blog/resource/too-dirty-too-dangerous/#:~:text=Why%20health%20professionals%20reject%20natural%20gas&text=Proximity%20to%20fracking%20operations%20are,neurological%20and%20cancer%2Drelated%20problems (hereinafter Physicians Report).

[306] Mary Finley-Brook et al., *Critical energy justice in US natural gas infrastructuring*, 41 ENERGY RESEARCH & SOCIAL SCIENCE 178, 180–81 (2018).

[307] Physicians Report, at 22.

mile of existing natural gas facilities and the number is growing every year."[308] These communities suffer at greater rates from health issues associated with gas infrastructure. "As a result of ozone increases due to natural gas emissions during the summer ozone season, African American children are burdened by 138,000 asthma attacks and 101,000 lost school days each year."[309] African American children have asthma at a greater rate than white children, and the death rate with asthma as the underlying cause is ten times greater for African Americans.[310]

When developing an environmental justice review process, it is critical to recognize that no one environmental justice review will work for all projects. Instead, the tools used to identify environmental justice communities must be tailored to the specific project; thus, the Commission cannot automatically assume that its use of a specific study area and reference area in one pipeline review can be automatically dispatched in a new pipeline review without adjustment. Environmental justice reviews must be flexible and tailored to the particular project and must not be gerrymandered to avoid addressing environmental justice concerns.[311]

Furthermore, the methodology that an agency selects must both be reasonable and adequately explained.[312] Unfortunately, historically, the Commission's environmental justice reviews have been neither, sometimes causing absurd results. For example, the Commission used a nearly 500-square mile study area to analyze whether the community located near the proposed

[308] Lesley Fleischman and Marcus Franklin, *Fumes Across the Fence-line: The Health Impacts of Air Pollution from Oil & Gas Facilities on African American Communities*, NAACP (2017), at 4.

[309] *Id.*

[310] U.S. Department of Health and Human Services, Office of Minority Health, *Asthma and African Americans*, https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=15 (last accessed May 19, 2021).

[311] *See Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 255 F.Supp.3d 101, 137-40 (D.D.C. 2017) (holding the agency's choice of a 0.5 kilometer area of analysis as unreasonable); *Idaho Sporting Congress, Inc. v. Rittenhouse*, 305 F.3d 957, 973-74 (9th Cir. 2002) (rejecting the agency's choice of analysis scale because it was arbitrary).

[312] *Standing Rock Sioux Tribe*, 255 F.Supp.3d at 137; *Idaho Sporting Congress, Inc*, 305 F.3d 957 at 973.

Union Hill Compressor Station would be located in an environmental justice community—a study area that was improperly large even under the Commission's own criteria.[313] Similarly, in the Rio Grande LNG project, the Commission summarily concluded that infrastructure sited entirely in environmental justice communities cannot have disproportionate impacts,[314] essentially encouraging project developers to site facilities in the poorest and most disadvantaged locations.

Some of these errors can be abated by modifying how the Commission identifies environmental justice communities. For example, the Commission must abandon its practice of lumping all "minority" populations together. This practice treats people of color as interchangeable, conflates distinct environmental justice concerns, and produces flawed results. For example, in the Atlantic Coast Pipeline proceeding, the Commission failed to identify any Indigenous populations along the route as environmental justice communities because those populations' raw sizes were too small to be picked up by the Commission's methodology, even though evidence existed in the record that these populations represented 25 percent of North Carolina's entire Indigenous population.[315]

Additionally, "minority" and "low-income" communities are the not the only types of communities that can be disadvantaged by gas infrastructure. For example, more than one in five

[313] ACP EIS at 4-511– 4-515 (one of the census tracts analyzed was not within one mile of the project route and was therefore improperly included in the assessment).

[314] *See Rio Grande LNG, LLC*, 169 FERC ¶ 61,131 (2019), Comm'r Glick and Comm'r Clements, dissenting, at p.3 (Rio Grande LNG "raises serious environmental justice concerns. The Commission, however, has never adequately confronted those concerns, instead taking the untenable still-hard-to-fathom position that the facilities do not raise environmental justice concerns because their impacts fall almost exclusively on environmental justice communities.").

[315] "Joint Comments by Public Interest Groups," Accession No. 2010405-5307, Docket Nos. CP15-554-001, CP15-555-000, CP15-556-000.

older American residents live in rural areas.[316] Given that pipelines tend to be sited in rural areas, pipeline projects risk disproportionate effects on elderly populations. The EJSCREEN captures demographic data for individuals over age 65. While the Commission has made steps to include data such as this in its environmental reviews, it rarely does anything with that information. For example, in the Jordan Cove LNG Environmental Impact Statement, the Commission acknowledged that the project affected a higher senior population than the Oregon average, but this fact played zero role in the Commission's environmental justice analysis.[317] Adding more information just to add information—without explaining how this data was considered or is relevant—does not turn a deficient environmental justice analysis into a sufficient one.

The Commission also needs to ensure that it uses the most precise study areas and reference populations available to identify environmental justice communities. For example, the Commission needs to move away from its default use of census tracts and regularly incorporate a comparison of both the affected census tracts and census blocks against an appropriate reference population.[318] The choice of reference population likewise will be influenced by the particular circumstances. The reference population must be distinct enough from the study area so as to not produce circular results. For example, often the affected state can be an effective reference population. Selection of the proper reference population is critical because it is the reference population that "establishes the baseline, the denominator of the equation by which

[316] Amy Symens Smith and Edward Trevelyan, *In Some States, More Than Half of Older Residents Live in Rural Areas*, CENSUS.GOV, https://www.census.gov/library/stories/2019/10/older-population-in-rural-america.html#:~:text=More%20than%201%20in%205,to%2013.8%25%20in%20urban%20areas.

[317] "Final Environmental Impact Statement for the Jordan Cove Energy Project," Accession No. 20191115-3040, Docket Nos. CP17-494-000, CP17-495-000, at 4-626.

[318] Even the best census data, however, still has flaws, particularly when assessing the presence of communities of color. *See, e.g.*, Kori Hale, *Being Undercounted in the U.S. Census Costs Minority Communities Millions of Dollars*, FORBES (Mar. 24, 2020), https://www.forbes.com/sites/korihale/2020/03/24/being-undercounted-in-the-us-census-costs-minority-communities-millions-of-dollars/?sh=2393cc683aa0.

disproportionality is calculated."[319] Both the CEQ and EPA guidance are helpful in identifying the proper study area and reference population for a particular project.

> *Question E2: Are there concerns regarding environmental justice communities' participation in past Commission proceedings? If so, what are the concerns? Please provide concrete examples.*

ANSWER: Yes. Based on our listening sessions, as well as the feedback the Commission has heard in the Office of Public Participation docket, environmental justice communities have not been able to fully participate in the Commission process. This is due to a variety of factors, many of which are highlighted in the Office of Public Participation docket comments.[320] Many of the recommendations offered by Earthjustice in that docket are applicable here.[321] However, in these comments, we highlight the three most common responses we received in our feedback sessions.

First, the certificate review process is technical in nature, involves mountains of legalese, and is highly specialized. Even the resources on the Commission's website that are geared toward landowners or affected communities are difficult to navigate and comprehend.[322] The reality is that most people have never heard of FERC. In order to ensure robust participation, the Commission must take steps to make the agency and its work accessible to non-energy experts. For example, the Commission should develop and make available one-pagers outlining the certificate review process, the intervention process, and the rehearing and appeal process. The Commission should promote these resources in a variety of locations, including on its website, in

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[319] Ann Hartell, *Methodological Challenges of Environmental Justice Assessments for Transportation Projects*, 2013 TRANSP. RESEARCH RECORD 21, 22 (2007).

[320] *See, e.g.*, Docket No. AD21-9-000.

[321] "Comments of Earthjustice," Accession No. 20210423-5251, Docket No. AD21-9-000; "Supplemental Comments of Earthjustice," Accession No. 20210507-5077, Docket No. AD21-9-000.

[322] *See, e.g.*, "Landowner Topics of Interest," FERC, https://www.ferc.gov/industries-data/natural-gas/landowner-topics-interest (last accessed May 19, 2021).

emails and letters to affected stakeholders, and on social media. Critically, it should ensure that these basic resources are available in a variety of languages, particularly the languages spoken by the affected population. Given the prevalence of gas infrastructure in the Gulf of Mexico, the Commission should develop an entire duplicate website in Spanish to assist Spanish-language community-members[323] and ensure that project-related materials are available in Vietnamese.[324]

Second, the Commission should simplify the comment process. Many participants noted that other federal agencies, including DOE's Office of Fossil Energy, allow comments to be filed by email. By contrast, the Commission's e-Library filing system is cumbersome even for sophisticated filers, subject to routine outages, and requires parties to register in order to file. Many participants also questioned why the Commission has instituted a 5:00 p.m. Eastern Time filing deadline, noting that many other courts and agencies, including the Internal Revenue Service (i.e., the agency with which many individuals are most familiar) uses a midnight local time deadline.[325]

Third, the Commission must take steps to connect with affected communities. Many participants noted the frustration that individuals based in Washington, DC, who may have never visited a local community, are nonetheless making value judgments about the populations and communities that live there. For example, one participant, referencing the Commission's analysis of Union Hill in the Atlantic Coast Pipeline proceeding, observed that had anyone from the Commission ever visited Union Hill, they would have known that the Commission's environmental justice analysis was incorrect. To address this, the Commission should consider

[323] Other federal agencies already do this. *E.g.*, CDC Website, https://www.atsdr.cdc.gov/es/index.html; FEMA Website, https://www.fema.gov/es.

[324] *E.g., BPSOS-Gulf Coast*, BPSOS, https://www.bpsos.org/bpsos-gulf-coast (last accessed May 26, 2021).

[325] "Topic No. 301: When, How, and Where to File," IRS, https://www.irs.gov/taxtopics/tc301 (last accessed May 19, 2021).

embedding Commission staff in communities along a proposed project, or engaging in regular, well-publicized Commission site visits. The Commission already has recognized the benefit of having regional offices, such as its new Houston office. Likewise, FERC employees who are embedded in or regularly visit a community are more likely to identify potential environmental justice concerns early in the process. As above, any meetings held in the local community must be publicized broadly, through a variety of means (newspapers, social media, notices on the docket) and should be available in a variety of languages.

With respect to tribes, the Commission's past and current difficulties in engaging with tribes were made clear by the Commission's recent efforts to solicit input from tribes on the Office of Public of Participation. The Commission conducted listening sessions for tribes where there was very little participation.[326] When asked during the listening session what outreach FERC did to target tribal governments, a FERC representative indicated that they sent out an email to the tribal contacts they had on file.[327] As Commissioner Clements has recognized, that effort plainly fell far short of the kind of meaningful outreach required and resulted in tribes failing to receive notice of the sessions or receiving notice within days of the sessions.[328]

The comments submitted by tribes in the Office of Public Participation docket also highlight the extent of the work the Commission needs to do, stating broadly that

> Tribal Nations continue to experience inconsistencies in consultation policies, the violation of consultation policies, and mere notification of federal action as opposed to a solicitation of input. Letters are not consultation. Teleconferences are not

[326] *See* Tr. of the 03/24/2021 Public Participation Listening Session, Docket No. AD21-9-000 (Apr. 5, 2021).

[327] *Id.*

[328] *See, e.g.*, "Comments of Confederated Tribes of Umatilla Indian Reservation," Accession No. 20210426-5048, Docket No. AD21-9-000.

> consultation. Providing the opportunity for Tribal Nations to offer guidance and then failing to honor that guidance is not consultation.[329]

As stated by the United South and Eastern Tribes, "[u]nfortunately, the Commission has an abysmal track record regarding consultation with Tribal Nations. Project proponents that fall within the purview of FERC's oversight and approval processes have also not been held accountable by the Commission for damage to Tribal Nation historic, cultural, and natural resources."[330] Additionally, the Confederated Tribes of the Umatilla Indian Reservation stated:

> Ultimately, FERC has proven to be uniquely incapable of properly consulting with tribes due to its internal procedural mechanisms (e.g., ex parte communication rules) and self-imposed strictures that too often seem to be more attentive to the wishes and desires of private industries and businesses and not to the legal mandates applicable to your duties to tribal trustees. This rigid adherence to internal FERC dictates has far too often enabled to agency to skirt or elude entirely its duties under treaties and other laws, such as the [NHPA] and its Section 106 consultation obligations…. In the past, FERC's actions and decisions have too often led to extensive loss, damage, and degradation of resources—particularly fish populations, water quality, and cultural sites and resources—that are critically important to the CTUIR and other tribes. Lack of proper, respectful consultation by FERC with tribes has contributed to too many instances of diminished and undermined protections for tribal First Foods, cultural and other resources, and the healthy environment they require. Present and future FERC actions and decisions must forge a new path forward, and away from this problematic past.[331]

The Pechanga Band of Luiseño Indians commented that "FERC's administrative process is notoriously technical, opaque, and governed by complex regulations which often renders proceedings virtually inaccessible respecting matters central to Native American tribes."[332] The

[329] "Comment of United South & Eastern Tribes Sovereignty Protection Fund," Accession No. 20210423-5189, Docket No. AD21-9-000.

[330] *Id.*

[331] "Comments of Confederated Tribes of Umatilla Indian Reservation," Accession No. 20210426-5048, Docket No. AD21-9-000.

[332] "Comments of Pechanga Band of Luiseño Indians," Accession No. 20210423-5322, Docket No. AD21-9-000.

Hopi Tribe stated that it "does not regularly interact with FERC," and discussed the financial burden faced by tribes that limit their ability to engage in the Commission's proceedings.[333]

Particular pipeline projects involving tribes also demonstrate how the Commission has historically not adequately considered how these projects would affect tribes and tribal resources. For example, the Commission approved the Pacific Connector Gas Pipeline prior to the completion of tribal consultation,[334] despite the fact that tribes raised concerns that numerous cultural resources lay in the path of the pipeline and surveying was not finished.[335] Similarly, the Commission approved the Double E Pipeline before consultation with the Hopi Tribe was complete.[336] In another case, the Commission claimed that the Sappony Indian Tribe was a consulting party,[337] but the Tribe told the Commission that it first learned that it had been granted consulting party status in the order the Commission issued approving the Mountain Valley Pipeline-Southgate project.[338] During its review of Mountain Valley Pipeline-Southgate, the Commission conducted a single in-person meeting with the Monacan Indian Nation and no meetings with the Sappony Indian Tribe.[339]

Question E3: What measures can the Commission take to ensure effective participation by environmental justice communities in the certificate review process?

[333] "Comments of Hopi Tribe," Accession No. 20210426-5034, Docket No. AD21-9-000.

[334] *Jordan Cove Energy Project, L.P.,* 170 FERC ¶ 61,202, at P 292 (2020).

[335] *See* "Sierra Club, Niskanen Center, et al Request for Rehearing," Accession No. 2020420-5239, Docket Nos. CP17-494-001, CP17-495-001.

[336] *Double E Pipeline, LLC*, 173 FERC ¶ 61,074, at P 138 (2020).

[337] *Mountain Valley Pipeline, LLC*, 172 FERC ¶ 61,261, at P 46 (2020).

[338] "Request for Rehearing of the Order and Request to Reopen Consultation of the Monacan Indian Nation and the Sappony Indian Tribe," Accession No. 20200720-5143, Docket No. CP-19-14-001.

[339] *Mountain Valley Pipeline, LLC*, 172 FERC ¶ 61,261, PP 53, 55 (2020).

ANSWER: Much of our answer to Question E2, *supra*, also applies to Question E3. However, we offer the following comments with respect to the Commission's tribal consultation. Although the Commission has adopted and amended a Policy Statement on Consultation with Indian Tribes (PSCIT), there is often a significant disconnect between the commitments made in the PSCIT and the Commission's conduct in pipeline proceedings. As is clear from the examples outlined in these comments, too often, the Commission staff treat consultation as a "check-the-box" exercise that does not allow the tribes to provide meaningful input that actually informs the Commission's ultimate decision on whether to approve a project.

In addition to the efforts being undertaken to establish an Office of Public Participation, FERC must take further steps in its pipeline review process to ensure that it is upholding its trust and treaty obligations to protect tribal interests and embraces a more transparent, respectful relationship with Tribal Nations. The following is a non-exhaustive list of suggestions for the Commission to consider as it improves its pipeline review process. However, as is articulated above, we do not represent tribes, tribal communities, or tribal citizens and do not claim to speak for them in any capacity. The Commission must take additional steps to get direct feedback from tribes on what measures would improve how tribes and tribal members participate in the certificate process. With those caveats, preliminary suggestions include:

- Reforming the Commission's ex parte rules to allow for confidential government-to-government discussions about projects. This request was made in a number of comments submitted in the Office of Public Participation process.[340]

- Ensure that no project is approved, even conditionally, prior to the completion of tribal consultation and the NHPA Section 106 process.[341]

[340] *E.g.*, "Comments of Earthjustice" at 34, Accession No. 20210423-5251, Docket No. AD21-9-000.

[341] *See, e.g.*, "Request for Rehearing of the Order and Request to Reopen Consultation of the Monacan Indian Nation and the Sappony Indian Tribe," Accession No. 20200720-5143, Docket No. CP-19-14-001.

- While the Commission's PSCIT recognizes its authority over gas pipeline projects, it contains three provisions that apply only to the Commission's consideration of hydroelectric projects.[342] There is no reason why the Commission should not also institute the same approach for its review of gas pipeline projects and:

    - increase direct communications with tribal representatives;

    - seek to notify potentially affected tribes about upcoming gas projects; and

    - consider any comprehensive plans prepared by Indian tribes or intertribal organizations for improving, developing, or conserving a waterway or waterways affected by the project—gas pipelines can have significant impacts to waterways and fisheries and tribal plans to protect those resources should be considered when determining whether to approve a pipeline project.

- Create a clear process for consultation that includes four distinct phases:

    - Identification: The Commission identifies projects that may be appropriate for consultation. This would include a determination of the complexity of the project, its potential implications for tribes, and any time and/or resource constraints relevant to the consultation process. This phase should also include an initial identification of the potentially affected tribe(s).

    - Notification: The Commission must notify potentially affected tribes in a number of ways, depending on the nature of project and number of tribes affected. The Commission should honor tribal preferences regarding the specific mode of contact and not assume that one-size-fits-all, e.g., that emailing a set list of contacts will suffice. The notification must include sufficient information for tribal officials to make an informed decision about the desire to continue with consultation and sufficient information to understand how to provide informed input. Notification must occur as early in the process as possible.

    - Input: This phase should include a range of interactions between the Commission and the tribes, including written and oral communications including exchanges of information, phone calls, meetings, and other appropriate interactions depending upon the specific circumstances involved. Those interactions must not be limited to written comments, must include more than a single meeting, and must not be funneled through third parties.

        - The Commission must ensure the creation of multiple, meaningful opportunities for tribes to, among other things, identify their concerns; advise on the identification and evaluation of historic properties,

[342] *See* 18 C.F.R. § 2.1c(i)–(k).

including those of traditional religious importance; express concerns about the pipeline's potential effects on those historic properties; and participate in crafting mitigation strategies to resolve adverse effects.

- The Commission should coordinate with tribal officials during this phase to be responsive to their needs for information and to provide opportunities to provide, receive, and discuss input.

- During this phase, the Commission must actively consider the input from tribes regarding the project in question.

- Follow-up: The Commission will provide feedback to the tribes(s) involved in the consultation to explain how their input was considered in the final action. This feedback should be a formal, written communication from a senior FERC official involved to the most senior tribal official involved in the consultation.

- The Commission should create, maintain, and provide, at the tribes' request, a complete record of the consultation process.

- The Commission must respond to all requests for information from and comments by tribes prior to issuing its decision on the pipeline.

- The Commission must provide adequate opportunities for tribes to provide feedback and comments on cultural resource reports and NEPA environmental review documents. Thirty-day periods are insufficient for tribes to review these types of materials. To the extent that signing non-disclosure agreements are required to give tribal members access to sensitive materials, drafts of such agreements must be provided to the tribes for review and editing well in advance of the reports they cover so that the time a tribe has to review a report is not eroded and the tribe has ample time to negotiate the terms of the agreement.

- Claims by tribes relating to cultural and other tribal resources must be treated by FERC as true and rebutted only if the Commission has information sufficient to persuade a neutral third party. If the Commission rejects tribal assertions relating to tribal resources, it must present information in its final decision refuting the tribes' claims, rather than simply dismissing the tribes concerns in its environmental and decisional documents.

- The Commission should not delegate any aspect of its consultation obligation to third party entities, including industry representatives or consultants. The consultation must occur government-to-government.[343]

[343] ., "Comment of United South & Eastern Tribes Sovereignty Protection Fund," Accession No. 20210423-5189, Docket No. AD21-9-000.

Question E3 (sic) (E4): When evaluating disproportionately high and adverse effects on environmental justice communities, should the Commission change how it considers the location or distribution of a project's impacts? If so, how?

ANSWER: Yes. However, as noted in the answer to Question E1, *supra*, environmental justice reviews must be tailored to the specific project at issue. There is no "one-size-fits-all" approach that will work. By analyzing the potential impacts using a variety of potential study areas (e.g., census tracts and census blocks) and reference groups (e.g., counties, states), and by ensuring that the metrics for identification align with CEQ and EPA best practices, the Commission will better illuminate potential environmental justice concerns and, in turn, better address locational and distributional concerns.

Further, as noted in the answer to Question E5, *infra*, the Commission has at times ignored the possibility that new gas infrastructure, such as a compressor station, may have disproportionately high and adverse effects on environmental justice communities based on its finding that emissions from the compressor station will not exceed regulatory permittable levels—for example, that emissions will not interfere with the attainment or maintenance of NAAQS.[344] But whether a facility meets permitting requirements is distinct from whether it has a disproportionately high and adverse effect on environmental justice populations.[345] The Commission should ensure that it looks beyond a facility's mere compliance with air quality standards to determine whether environmental justice communities closest to the facility are disproportionately affected by the facility's emissions or other environmental effects.[346]

[344] *See, e.g.*, "ACP EIS at 4-514.

[345] EPA, "Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis" § 3.2.2 (Apr. 1998), *available at* https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_epa0498.pdf (recognizing that even harms that are not "significant" in NEPA context may disproportionately or severely harm environmental justice communities).

[346] *See Friends of Buckingham v. State Air Pollution Control Bd.*, 947 F.3d 68, 91-92 (4th Cir. 2020) (vacating air permit for Atlantic Coast Pipeline compressor station because, *inter alia*, state air board's reliance on

Moreover, as is the case with environmental justice communities, indigenous communities disproportionately bear the effects of environmental problems. How those burdens affect tribes, however, can differ in important ways from other environmental justice communities that the Commission must consider in evaluating these effects on tribal communities. For example, tribes and their members often have a unique connection to the land and environment. Many indigenous cultures are land-based and are connected to a certain location or area.[347] "[L]and 'is important to Indian people in a multitude of ways: beyond subsistence, land is the source of spiritual origins and sustaining myth which in turn provides a landscape of cultural and emotional meaning. The land often determines the values of [their] human landscape.'"[348] "[S]piritual connection between many Native nations and their surrounding environment is crucial to the self-determination of these communities."[349]

Indigenous groups also are bearing a disproportionate burden of climate change. Many tribes reside in remote and vulnerable areas and climate change is causing a loss of resources that are critical to tribal subsistence.[350] Tribes also may be more limited in their ability to adapt to climate change, for example, many are legally tied to the land because of reservations and therefore unable to relocated to follow game, fish, or other resources that migrate as temperatures warm.[351] In short, the Commission must consider on a case-by-case basis how historical,

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air quality standards and resulting "failure to consider disproportionate impact on those closest to the Compressor Station resulted in a flawed analysis.").

[347] Elizabeth Ann Kronk Warner, *Environmental Justice: A Necessary Lens to Effectively View Environmental Threats to Indigenous Survival*, 26 TRANSNAT'L L. & CONTEMP. PROBS. 343, 351 (2017).

[348] *Id.* at 350 (quoting Frank Pommersheim, *The Reservation as Place: A South Dakota Essay*, 34 S.D. L. Rev. 246, 250 (1989)).

[349] *Id.* at 351.

[350] *Id.* at 366.

[351] *Id.*

cultural, and environmental realities have affected tribes that may be impacted by pipeline projects and factor those realities in to any assessment under the NGA or NEPA.

> *Question E4 (sic) (E5):When evaluating disproportionately high and adverse effects on environmental justice communities, should the Commission change how it considers population-specific factors that can amplify the experienced effect, such as ecological, visual, historical, cultural, economic, social, or health factors? If so, how? Should the Commission change how it considers multiple or cumulative adverse exposures and historical patterns of exposure to pollution or other environmental hazards? If so, how? How can the Commission obtain high-quality information about cumulative impacts (e.g., data on cancer clusters and asthma rates)?*

ANSWER: Yes. When assessing the potential for disproportionately high and adverse effects, the Commission must consider "relevant public health data and industry data concerning the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population."[352] The repeated siting of facilities that individually meet air quality standards will cumulatively affect the overall air quality in a particular region. This obvious fact notwithstanding, the Commission has repeatedly declined to find a disproportionate impact in such situations. For example, as noted in the answer to Question E4, *supra*, when evaluating the Northampton Compressor Station, the Commission acknowledged that the compressor station would emit an additional 3.4 tons of hazardous air pollutants, 18 tons of particulate matter pollutants, and would result in a 33 percent increase in the 1-hour annual concentration of particulate matter smaller than 2.5 microns.[353] The Commission further acknowledged that "several different cancer-related compounds and chemicals are present in the air in proximity to construction and operation of compressor station[]" and that these substances "have documented health effects on the general and vulnerable populations."[354] Nevertheless, the Commission

[352] CEQ Guidance at 9.

[353] ACP EIS at 4-561.

[354] *Id.* at 4-514.

concluded that the facility did not pose a disproportionate impact on the identified environmental justice community because its individual emissions would be within permittable levels.[355] But since only facilities that are within permittable levels can be built, this essentially meant that the potential additive effects of the Northampton Compressor Station on the affected community were never considered. Put simply, a facility is not safe for that community simply because it meets necessary air quality minimums. If such were true, then a cumulative impacts analysis would never be necessary.

The availability of quality population evidence will vary project-to-project. In some cases, state or local health departments will track such information. In others, expert reports will be filed in the docket. For example, for the Northampton Compressor Station, the Northampton County Health Department already had determined that county residents had elevated asthma rates.[356] Additionally, a NAACP study noted that the cancer rate in Northampton County is higher than the state average.[357] Despite having both of these resources available to it, the Commission considered neither, instead depending on generic statements that "African American populations have a greater prevalence of asthma."[358] While availability will vary, the key takeaway is that the Commission should use the most location-specific information available and should take reasonable steps to supplement the record if necessary.

> *Question E5 (sic) (E6): Does the NGA, NEPA, or other federal statute set forth specific duties for the Commission to fulfill regarding environmental justice analyses in certain proceedings under the NGA?*

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[355] *Id.*

[356] *2014 Community Health Assessment*, NORTHAMPTON CTY. HEALTH DEP'T, at 20, *available at* https://www.northamptonhd.com/images/Northampton_County_2015_Community_Health_Assessment__51215.pdf (last accessed May 19, 2021).

[357] Lesley Fleischman and Marcus Franklin, *Fumes Across the Fence-line: The Health Impacts of Air Pollution from Oil & Gas Facilities on African American Communities*, NAACP (2017), at 7.

[358] ACP EIS at 4-514.

ANSWER: Yes. As the NGA was enacted in 1938—long before the concept of environmental justice was widely recognized—the statute does not explicitly use the words "environmental justice." Nevertheless, the NGA includes several provisions that authorize the Commission to consider and address environmental justice in certificate proceedings. As an initial matter, given that the Commission must consider "all factors bearing on the public interest"[359] to determine whether to authorize a pipeline project, and the courts have explicitly outlined that environmental factors are part of that assessment,[360] a project's impact on environmental justice is clearly one of the factors that must be considered as part of the Commission's overall NGA review. There is simply no basis for excluding environmental justice from an NGA public interest analysis.

Additionally, the Commission may only grant a certificate if it finds that the project developer will comply with the NGA "and the requirements, rules, and regulations of the Commission thereunder."[361] While the Commission does not currently have any "requirements, rules, or regulations" pertaining to environmental justice specifically, were the Commission to develop them—as indeed, it should—project applicants would need to comply with them in order to obtain a certificate. As such, the Commission should establish baseline environmental justice requirements that must be satisfied prior to certificate issuance.

The Commission has clear legal authority to establish new environmental justice requirements under the NGA, which authorizes the Commission "to perform any and all acts, and to prescribe, issue, make, amend, and rescind such orders, rules, and regulations at it may

[359] *See* 2018 NOI, at 5.

[360] *Sabal Trail*, 867 F.3d at 1373; *see also NAACP v. FPC*, 520 F.2d 432, 441-42 (D.C. Cir. 1975), *vacated and remanded on other grounds*, 425 U.S. 662 (collecting cases and outlining that environmental concerns "are the proper concern for the Commission.").

[361] 15 U.S.C. § 717f(e).

find necessary or appropriate to carry out the provisions of this chapter."[362] While, as noted previously, the Commission cannot create a "plug and play" tool for environmental justice, it would be helpful for the Commission to provide greater clarity about its approach to environmental justice by developing standards and best practices, subject to public comment, which would guide the agency's future actions. Without these guidelines, the Commission's current approach to environmental justice has been largely ad hoc; this diminishes government accountability and makes it more difficult for interested and affected parties to anticipate what the Commission will do about environmental justice for any given project.

Finally, the Commission has the legal authority to attach conditions to its certificates, including conditions to mitigate or avoid negative impacts to environmental justice populations: "The Commission shall have the power to attach to the issuance of the certificate … reasonable terms and conditions as the public convenience and necessity may require."[363] The Commission routinely includes conditions in certificates that require the certificate holder to protect the environment.[364] The Commission can and should make it standard practice to include a condition that requires certificate holders to mitigate or avoid impacts to environmental justice communities. In addition, the Commission should reexamine previously issued certificates to determine whether existing conditions adequately protect environmental justice communities that are affected by the project. If they do not, the Commission should modify the conditions in such certificates to ensure robust protection of such communities.

[362] 15 U.S.C. § 717o.

[363] 15 U.S.C. § 717f(e).

[364] *E.g., Columbia Gas Transmission Corp.*, 71 FERC ¶ 61,038, 61,158 n.3 (1995) ("The Commission has used the same environmental condition in other proceedings.") (citing *Williams Nat. Gas Co.*, 70 FERC ¶ 61,304 (1995); *Questar Pipeline Co.*, 70 FERC ¶ 61,131 (1995); *Pacific Gas Transmission Co*, 70 FERC ¶ 61,016 (1995)).

Beyond the NGA, NEPA requires that the Commission consider the environmental effects of a proposed action—i.e., approving a gas pipeline—prior to making its decisions. This includes the environmental justice effects of a proposed pipeline project: "Federal agencies must consider environmental justice in their activities under [NEPA]."[365] In terms of specific duties, the Commission must identify and analyze the significance of the environmental justice effects of a pipeline project using a reasonable and adequately explained methodology (NEPA), and then, as discussed above, combine that assessment with all other relevant factors to determine whether the proposed project is required by the public convenience and necessity (NGA).

Additionally, as the Commission has acknowledged, FERC owes specific duties to tribes. Its Tribal Consultation Policy expressly states that "as an independent agency of the federal government, [FERC] has a trust responsibility to Indian tribes and this historic relationship requires it to adhere to certain fiduciary standards in its dealings with Indian tribes."[366] In addition to its trust responsibility and requirements under NHPA Section 106, as noted above, the Commission has adopted the PSCIT, which is supposed to have the "Commission, in keeping with its trust responsibility, [] assure that tribal concerns and interests are considered whenever the Commission's actions or decisions have the potential to adversely affect Indian tribes or Indian trust resources."[367]

In addition, tribes "are sovereign nations with at least some stewardship responsibility over the precise natural resources implicated by" the Commission's analysis of a project under

[365] EPA, *Environmental Justice and the National Environmental Policy Act,* https://www.epa.gov/environmentaljustice/environmental-justice-and-national-environmental-policy-act (last accessed May 19, 2021).

[366] 18 CFR § 2.1c(b).

[367] *Id.* § 2.1c(e).

NEPA.[368] "The Tribes' unique role and their government-to-government relationship with the United States demand that their criticisms be treated with appropriate solicitude" when evaluating a project that could affect their territory, people, or resources.[369] The Commission also is obligated to consider how the construction and operation of the pipeline projects it considers might affect resources covered by tribal treaties[370] and should avoid and mitigate impacts to tribal resources wherever possible.

> *Question E6 (sic) (E7): Should the Commission establish a method for evaluating mitigation for impacts on environmental justice communities (e.g., development projects in the local area)? If so, how should it mitigate to ensure the least disproportionate impact or eliminate the disproportionate burden on environmental justice communities? Would such mitigation be consistent with NGA section 7(e), which provides "[t]he Commission shall have the power to attach to the issuance of the certificate and to the exercise of the rights granted thereunder such reasonable terms and conditions as the public convenience and necessity may require?"*

ANSWER: Yes. The Commission should establish a method for evaluating mitigation measures to reduce impacts on environmental justice communities. Public input should play a significant role in informing the Commission's development of such a method, particularly input from environmental justice communities and the organizations that serve them. A consistent approach is critical to ensure that the Commission's decisions are tied to an articulable policy, which will lead to greater regulatory certainty both for project applicants and the public.

While a method should ultimately depend on environmental justice community input, we provide some initial suggestions for how the Commission should approach this issue while keeping equity front and center. The process for developing a method should begin with meaningful public outreach and engagement with environmental justice communities. Outreach

[368] *See Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 985 F.3d 1032, 1044 (D.C. Cir. 2021).

[369] *See id.*

[370] *See Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 255 F. Supp. 3d 101, 134 (D.D.C. 2017).

should, at minimum, be targeted to locations that are identified as environmental justice communities based on EPA's EJSCREEN or other highlighting tools.[371] The Commission should also convene a series of stakeholder meetings in which it solicits information directly from environmental justice community members. Such meetings should afford the opportunity to provide oral comments.

As noted above, the Commission should follow identified best practices for reaching environmental justice communities. It is not enough to simply post information on FERC's website and expect any environmental justice communities to find it: instead, the Commission must engage in targeted, proactive outreach to meaningful engage with environmental justice groups and communities around the country. For example, the Commission should identify and reach out directly to municipalities and local community groups, including places of worship, neighborhood associations, and nonprofit organizations located in or designed to serve an affected community.

The method should include a range of factors for the Commission to consider in evaluating mitigation opportunities in environmental justice communities. The list of relevant factors should be nonexclusive and should include, at a minimum: demographic information, including race, ethnicity, and socioeconomic data; local air and water quality; other polluting facilities that affect the community; the risk of cumulative exposure to pollutants, including the risk to sensitive population sub-groups such as children, pregnant women, the elderly, and people

[371] We say, "at minimum" because there are limitations to the EJSCREEN. As noted by EPA itself, "[a]nyone using EJSCREEN should note that there is substantial uncertainty in demographic and environmental data, particularly when looking at small geographic areas. EJSCREEN is not intended to provide a risk assessment. Also EJSCREEN does not provide data on every environmental impact and demographic indicator that may be relevant to a particular location, and data may be several years old. Screening results should be supplemented with additional information and local knowledge to get a better understanding of the issues in a selected location. It is important to understand the caveats and litigations when using EJSCREEN." *What is EJSCREEN*, EPA,, https://www.epa.gov/ejscreen/what-ejscreen (last accessed May 26, 2021).

with respiratory problems such as asthma; and climate risks that could impact proposed gas facilities and negatively affect the surrounding community. The method should require the Commission to assess mitigation measures based on feasibility, cost, demonstrated success in mitigating harmful health and environmental effects associated with gas infrastructure, and the community's preferences. The Commission should solicit community input, so local residents have an opportunity to weigh in on proposed mitigation measures, and the Commission should take that feedback into account in determining which measures should apply. Since the entire purpose of mitigation is to minimize the harm on an affected community, the Commission must give great weight to the suggestions offered by the community (i.e., the recipient) itself.

Once the Commission has obtained substantial input on the proposed method from environmental justice communities and other stakeholders, it should issue a draft proposal and provide an opportunity for public comment. The Commission should also hold several virtual public meetings (even post-COVID) in which stakeholders can ask questions and provide comments about the draft. The meetings should be held at different times of day, with at least one meeting scheduled in the evening (for each time zone) so people who work during the day can attend. The meetings should be recorded, and the videos should be posted on the Commission's website, so people who are unable to attend can watch a video recording. When the method is finalized, it should be published on the Commission's website along with a fact sheet summarizing key points in plain language, which is available in multiple other languages. The method should be regularly reviewed (at least every five years) to ensure that implementation is working well and to modify any elements that are not effective.

Furthermore, the Supreme Court has held that an environmental review must "contain a detailed discussion of possible mitigation measures" to address adverse environmental

impacts.[372] The Commission regularly uses its broad conditioning authority to implement mitigation measures to support its overall public interest finding, and the Commission already uses its conditioning authority to mitigate the societal impacts of gas projects. For example, in the Jordan Cove LNG proceeding, the Commission required the certificate-holder to designate a Construction Housing Coordinator to address any potential housing availability concerns.[373] There is nothing in NGA Section 7(e) that would preclude the Commission from also using its conditioning authority to squarely address environmental justice concerns. The specific mitigation measures that may be appropriate will depend on the specific factors at issue in the specific pipeline proceeding. Potential examples may include requiring modifications in the construction method and timing or in requiring supplemental health and air impact monitoring, subject to input from the community.[374] The Commission should also revisit approved projects that disproportionately impact environmental justice communities and, as necessary, add mitigation measures to limit those negative impacts.

Of course, the Commission could ensure the "least disproportionate impact" on environmental justice communities by denying any new certificates for facilities that would negatively affect environmental justice communities that are disproportionately burdened by pollution. This would be the most effective means of eliminating additional burdens on such communities from new or expanded gas infrastructure. At the very least, the Commission should include conditions with stringent environmental justice mitigation measures in certificates. The details of such mitigation measures should be project-specific and should consider the

[372] *Robertson v. Methow Valley Citizens*, 490 U.S. 332, 489 (1989).

[373] *Jordan Cove Energy Project L.P.*, 170 FERC ¶ 61,202, at P 239 (2020); *see also Jordan Cove Energy Project L.P.*, 170 FERC ¶ 61,136 (2020), Comm'r Glick, dissenting, at p.18 (noting the Commission's imposition of a Construction Housing Coordinator to mitigate housing access concerns).

[374] Note, however, that unlike a pipeline's GHG emission impacts, mitigating environmental justice impacts cannot be done by offsetting pollution elsewhere—they must be avoided in the first instance.

preferences of affected community members and groups. If certificate holders violate these conditions, the Commission should revoke their certificates.[375]

> *Question E7 (sic) (E8): Does the NGA, NEPA, or other federal statute set forth specific remedies for the Commission to implement based on factual findings of environmental justice metrics or defined impacts? Do these statutory remedies include rejection of a proposed project otherwise found to be needed to serve the public interest? Which other remedies are authorized by statute?*

ANSWER: Caselaw already makes it clear that, pursuant to its NGA authority, the Commission may "deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment."[376] This is because a project's environmental impacts necessarily are a relevant factor in whether the project is required by the public convenience and necessity. The Commission would be well within its right to find that, upon balancing a project's potential benefits and harms, the environmental harms are so severe so as to outweigh other factors and render the project incapable of certification. In fact, were FERC to authorize a project in such a circumstance, that decision would be arbitrary and capricious and inconsistent with the NGA's mandate that only projects required by the public convenience and necessity shall be approved.

Furthermore, FERC possesses authority under its trust responsibility to the tribes to deny projects that would violate the Commission's fiduciary duty to a tribe by conflicting with tribal treaty rights.[377] If a project cannot be rerouted to avoid having too great an impact on tribal resources—both those on and off reservation—the Commission must deny the project.

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[375] The Commission has not hesitated to rescind certificates when conditions were not satisfied. *See, e.g.*, *Wyo.-Calif. Pipeline Co.*, 70 FERC ¶ 61,041, 61,130 (1995) (revoking a certificate because the company failed to initiate construction within five years, "despite the fact that all parties were put on notice that construction was to be *completed*, and service initiated, within five years of the date certificate authorization was issued."). In some circumstances, even a certificate holder's "anticipatory failure to comply with the conditions of its certificate" can justify revocation. *Pub. Utilities Comm'n v. FPC*, 205 F.2d 116, 120 (3d Cir. 1953) (upholding the Commission's revocation of a certificate because the company was unable to build a certificated gas pipeline due to financial and procurement difficulties).

[376] *Sabal Trail*, 867 F.3d at 1373.

[377] *See, e.g.*, *Nw. Sea Farms Inc. v. U.S. Army Corps of Eng'rs*, 931 F. Supp. 1515 (W.D. Wash. 1996).

Put another way, if market demand was, by itself, sufficient to approve projects, then the Commission would never need to undergo a NEPA review, or balance the project benefits against environmental or other factors; as long as the project applicants could offer evidence of market demand, the project could be approved. Although one could conclude based on the Commission's track record that this is, in fact, the standard, it is not. Only projects that are **both** required to meet market demand and are in the public interest shall be approved.

Environmental justice is not a second-class environmental impact. The Commission should not create a system of "separate but equal" environmental impacts. Indeed, given the historical siting of gas infrastructure in marginalized communities, if anything, environmental justice should be given **more** probative weight. If the Commission follows these recommendations and adopts a reasonable and adequately explained environmental justice analysis, and, based on that analysis, concludes for a particular project that the environmental justice effects are so severe that, when balanced against other factors, the proposed project is inconsistent with the NGA, it not only could, but must, reject the project.

Conclusion

The Public Interest Organizations appreciate the opportunity to offer supplemental comment regarding the Commission's review of proposed gas pipeline projects. We look forward to continuing to work with the Commission on these important issues.

Respectfully submitted,

Gillian Giannetti
Senior Attorney
Natural Resources Defense Council
ggiannetti@nrdc.org

John Moore
Director
Sustainable FERC Project
moore.fercproject@gmail.com

(*more signatories on the next page*)

Adam Carlesco
Staff Attorney, Climate & Energy
Food & Water Watch
acarlesco@fwwatch.org

Shiloh Hernandez
Staff Attorney
Western Environmental Law Center
hernandez@westernlaw.org

Elly Benson
Senior Attorney
Sierra Club
elly.benson@sierraclub.org

Erin Saylor
Staff Attorney
Columbia Riverkeeper
erin@columbiariverkeeper.org

Tyson Slocum
Energy Program, Director
Public Citizen, Inc.
tslocum@citizen.org

Pamela Goddard
Senior Program Director, Mid-Atlantic Region
National Parks Conservation Association
pgoddard@npca.org

Derek O. Teaney
Deputy Director
Appalachian Mountain Advocates, Inc.
dteaney@appalmad.org

Daniel E. Estrin
General Counsel and Advocacy Director
Waterkeeper Alliance
destrin@waterkeeper.org

Moneen Nasmith
Senior Attorney
Earthjustice
mnasmith@earthjustice.org

Susan Jane Brown
Wildlands Program Director
Staff Attorney
Western Environmental Law Center
brown@westernlaw.org

Shannon Laun
Staff Attorney
Conservation Law Foundation
slaun@clf.org

Dana Johnson
Director of the Federal Policy Office
WE ACT for Environmental Justice
dana@weact.org

Rebekah Sale
Executive Director
Property Rights and Pipeline Center
rebekahsale@pipelinecenter.org

Naomi Yoder
Staff Scientist
Healthy Gulf
naomi@healthygulf.org

Mark Sabath
Senior Attorney
Southern Environmental Law Center
msabath@selcva.org

Brendan Mysliwiec
Director of Federal Policy
Appalachian Trail Conservancy
bmysliwiec@appalachiantrail.org

(*more signatories on the next pages)*

Jeeva Abbate
Director
Yogaville Environmental Solutions
jeeva@yogaville.org

Mimi Bluestone
Co-Leader
350Brooklyn
info@350.org

Peter Anderson
Virginia Policy Director
Appalachian Voices
peter@appvoices.org

Donna Chavis
Senior Fossil Fuels Campaigner
Friends of the Earth
dchavis@foe.org

Liz Jones
Staff Attorney
Center for Biological Diversity
Climate Law Institute
ljones@biologicaldiversity.org

Alison Prost
Vice President for Environmental Protection and Restoration
Chesapeake Bay Foundation
aprost@cbf.org

Yvonne Taylor
Vice President
Seneca Lake Guardian
senecalakeguaradian@gmail.com

Joseph Campbell
President
Gas Free Seneca
muchado2@gmail.com

Barbara Adams
Co-Director
Richmond Interfaith Climate Justice League
barb5100@comcast.net

Chad Oba
President
Friends of Buckingham
chado108@gmail.com

Lewis Freeman
Executive Director
Allegheny-Blue Ridge Alliance
lewfreeman@gmail.com

Irene Leech
President
Virginia Citizens Consumer Council
vaconsumeradvocate@gmail.com

Myra Crawford
Executive Director
Cahaba Riverkeeper
info@chabariverkeeper.org

Crystal Cavalier
President/Founder
7 Directions of Service
crystal@crystalcavalier.com

Lynda Majors
Chair
Preserve Montgomery County VA
ljmajors@usa.net

Tina Weishaus
Co-Chair
DivestNJ Coalition
tweishaus@gmail.com

(*more signatories on the next page*)

Mark Miller
Executive Director
Virginia Wilderness Committee
nmiller24450@gmail.com

Heather Fenyk
Board President
Lower Raritan Watershed Partnership
hfenyk@lowerraritanwatershed.org

Kevin Corcoran
President and Treasurer
Central Jersey Safe Energy Coalition, Inc.
kevin.corcoran@cpa.com

Carole Balmer
Former Deputy Mayor, Committeewoman
Holmdel Township, New Jersey
Board Member, Citizens for Informed Land Use
cjdibalm@aol.com

Ken Dolsky
Co-Leader
Don't Gas the Meadowlands Coalition
Co-Leader
Coalition Against Pilgrim Pipeline-NJ
kdolsky@optonline.org

Sid Madison
Central Jersey Coalition Against Endless Wars
SidGWCC@gmail.com

Linda Powell
Outreach Director
Central Jersey Environmental Defenders
lindardathome@msn.com

Gregory Gorman
Chair
Skylands Group-Sierra Club
ggorman07419@embarqmail.com

Bill Schultz
Riverkeeper
Raritan Riverkeeper
raritan.riverkeeper@verizon.net

Luke Fisher
Trail Policy Program Director
Continental Divide Trail Coalition
lfisher@continentaldivide.org

Blair Nelson
Executive Director
Waterspirit
water@waterspirit.org

Doug Wellman
President
Friends of Nelson
wellman.doug@gmail.com

Richard G. Averitt
Partner
Rockfish Valley Investments, LLC
richard@raveritt.com

Roberts Bondurant
Preserve Bent Mountain
bondurantlaw@aol.com

Roseanna Sacco
Chairperson
Preserve Monroe
preservemonroe@gmail.com

Deana Luchs
President
Franklin JFK Democratic Club
jfkclubfranklin@gmail.com

(*more signatories on the next page*)

Angie Rosser
Executive Director
West Virginia Rivers Coalition
arosser@wvrivers.org

Bridget Vial
Work for Me, DTE! Campaign
bridget.vial@gmail.com

Anne Havemann
General Counsel
Chesapeake Climate Action Network
anne@chesapeakeclimate.org

Russell Chisholm
Co-Chair
Protect Our Water Heritage Rights
russell.powhr@gmail.com