UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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

COMMENTS OF PUBLIC INTEREST ORGANIZATIONS

The undersigned Public Interest Organizations[1] thank the Federal Energy Regulatory Commission (Commission or FERC) for opening a Notice of Inquiry (NOI)[2] to evaluate its 1999 Natural Gas Policy Statement for reviewing proposed interstate gas pipeline projects (Policy Statement).[3] It is wise for the Commission to take a fresh look at its 19-year-old policy.

The Policy Statement was adopted in a much different world. Gas production and pipeline construction have increased dramatically since 1999. Today, over 400 new pipeline project approvals later, concerns about pipeline overbuild and associated harms are growing, during a time when clean energy resources are no longer just ascendant but have arrived. Just as

[1] The Public Interest Organizations are: Natural Resources Defense Council; Sustainable FERC Project; Sierra Club; Earthjustice; Friends of Nelson; Southern Environmental Law Center; Public Citizen; Catskill Mountainkeeper; Riverkeeper, Inc.; GreenFaith; Conservation Law Foundation; Environmental Law and Policy Center; Union of Concerned Scientists; Center for Biological Diversity; Yogaville Environmental Solutions; WE ACT for Environmental Justice; Friends of Buckingham; Scenic Hudson, Inc.; Western Environmental Law Center; Virginia Interfaith Power & Light; Waterkeeper Alliance; Altamaha Riverkeeper; Assateague Coastal Trust/Assateague Coastkeeper; Bayou City Waterkeeper; Black Warrior Riverkeeper; Cahaba Riverkeeper; Calusa Riverkeeper; Cape Fear River Watch; Chattahoochee Riverkeeper; Choctawhatchee Riverkeeper; Colorado Riverkeeper; Columbia River Estuary Action Team; Emerald Coastkeeper; Environmental Law and Policy Center; Flint Riverkeeper; Green Riverkeeper; Hackensack Riverkeeper; Haw River Assembly; Humboldt Baykeeper; Lake Worth Waterkeeper ; Lower Susquehanna Riverkeeper Association; Middle Susquehanna Riverkeeper Association, Inc.; Milwaukee Riverkeeper; NY/NJ Baykeeper; Pamlico-Tar Riverkeeper; Potomac Riverkeeper Network; Quad Cities Waterkeeper, Inc.; Raritan Riverkeeper; Rogue Riverkeeper; Seneca Lake Guardian; A Waterkeeper Alliance Affiliate; Shenandoah Riverkeeper; ShoreRivers; St. Johns Riverkeeper; Suncoast Waterkeeper; Tampa Bay Waterkeeper; Tennessee Riverkeeper; Upper Allegheny River Project; Wabash Riverkeeper Network; West Virginia Headwaters Waterkeeper; White River Waterkeeper; Winyah Rivers Foundation, Inc.; Youghiogheny Riverkeeper with Mountain Watershed Association; and Yuba River Waterkeeper. On April 20, 2018, several of the Public Interest Organizations submitted a joint letter providing initial comments in this proceeding.

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

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

the mismatch between the 40-to-50-year lifespan of pipeline projects with the declining prospect of their long-term usefulness cannot be ignored, nor can the mismatch between the Commission's current implementation of its policy and its duty to protect the public interest.

The Public Interest Organizations call on the Commission to revise the Policy Statement to be consistent with its role under the Natural Gas Act (NGA) as "the guardian of the public interest"[4] when deciding whether to grant authorizations to build new gas pipelines and related infrastructure. To do this, we propose that the Commission revise the Policy Statement to ensure that the Commission considers all factors that are relevant to whether a project is needed and is required by the public interest, including a wide variety of economic and non-economic indicia.

The Policy Statement provides a process whereby the applicant must first demonstrate economic need[5] and then demonstrate that the project is in the public interest; this is not what happens in practice. Instead, as implemented by the Commission, the Policy Statement has enabled pipeline applicants to essentially guarantee themselves a certificate—and thereby meet the public interest requirement—simply by signing precedent agreements, which are long-term contracts between the pipeline developer and a prospective shipper to reserve pipeline capacity in advance of pipeline construction. But precedent agreements—alone—do not universally determine that there is an economic need for the project—and they do not universally determine

[4] *Fed. Power Comm'n 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).

[5] The Policy Statement uses the terms "need," "market need," market demand," and "demand," etc., interchangeably. It appears that the Commission generally envisions "need" to mean the market indicia that suggest that a pipeline is necessary to fill a market gap. This is supported by the fact that, in the Policy Statement, the Commission describes its need analysis as "essentially an economic test." Policy Statement at 18–19. For consistency, clarity, and to reflect the essential nature of the Commission's analysis, we generally refer to "need" in these comments as either "need" or "economic need." We generally use the term "purported economic need" to refer to the indicia of need offered by the applicant in support of a pipeline project.

that the project is in the public interest. The Commission should revise the Policy Statement to accomplish the Policy Statement's legitimate intent and stated purpose of avoiding sole reliance on precedent agreements to determine the need for a new pipeline project. We support an approach that analyzes the purported economic need in tandem with all other relevant factors, to ensure that only projects that are required for the public convenience and necessity receive a certificate, as required under the NGA.[6]

Revisiting the Policy Statement is particularly important given that project applicants are increasingly relying on affiliate precedent agreements—precedent agreements that are between a pipeline developer and an affiliated company—to demonstrate economic need. While the Commission currently treats affiliate and arms-length precedent agreements as equally probative of economic need, non-arms-length agreements are inherently less probative of economic need given their intra-corporate nature. When the pipeline applicant's affiliate-shipper is a monopoly utility or part of a monopoly utility holding company structure, the potential harms are even more severe, given that the utility's captive customers will pay for the pipeline, even if there is never any true economic need. There is a serious risk of stranded pipeline assets and related stranded costs. As discussed below, a recent study showed that $32 billion of proposed gas pipelines are subject to stranded cost risk. Sole reliance on affiliate precedent agreements distorts market signals and incentivizes pipeline overbuild, unduly disadvantaging competing clean energy resources and consumers and causing avoidable harm to the environment.

Additionally, the Commission must place reasonable restrictions on pipeline developers' exercise of eminent domain power and play a strong role in protecting impacted landowners and

[6] As the NOI recognizes, the "public convenience and necessity standard encompasses all factors bearing on the public interest." NOI at 5.

communities. The Commission must ensure that any property taken by eminent domain has a public purpose, given the severe impact condemnation has on public safety, homes, family farms, local businesses, and conservation lands. The Commission must also address the current issues surrounding the intersection of conditional certificates and eminent domain authority.

Further, the Commission should revisit its review process under the National Environmental Policy Act (NEPA) to ensure that it is disclosing and analyzing all direct, indirect, and cumulative impacts of a pipeline project. This includes, but is not limited to, disclosure and analysis of greenhouse gas (GHG) emissions that relate to a proposed pipeline project. Information derived from the Commission's NEPA analysis should also be incorporated into the Commission's NGA public interest review.

In addition, communities of color and other vulnerable communities are disproportionately in harm's way when gas pipelines are built; this inequity must be acknowledged and prevented. The Commission must use appropriate methodologies for assessing the burden of projects on communities of color, low-income communities, and Indian tribes. But the Commission's current methodology masks, rather than elucidates, environmental justice concerns.

Last, the Commission must provide more meaningful opportunities for public participation. Doing so will address some of the shortcomings that the U.S. Department of Energy's (DOE) Inspector General identified in its audit of the Commission's process, as well as help to rebuild public confidence in the Commission's review.

In short, the Commission's 19-year-old policy must be revised to fit within a 21st century world. The Public Interest Organizations are pleased to provide the following comments and recommendations to help the Commission as it reviews its policy.

COMMENTS OF PUBLIC INTEREST ORGANIZATIONS

Table of Contents

I. SUMMARY OF COMMENTS

Institute a holistic "all relevant factors" approach to issuing certificates of public convenience and necessity. The NGA[7] requires the Commission to determine whether a pipeline project is in the "public convenience and necessity." Only projects that are "required" by the public convenience and necessity shall receive certificates; the rest "shall be denied."[8] The public convenience and necessity standard has consistently been interpreted to mean determining whether a project is in the public interest. For example, the Supreme Court has labeled the Commission "the guardian of the public interest in determining whether certificates of convenience and necessity shall be granted."[9] The NGA further provides that the business of operating interstate pipelines is "affected with a public interest" and "that Federal regulation ... is necessary in the public interest."[10]

The Policy Statement outlines a three-part test to guide the Commission's NGA public interest review: (1) a determination of whether existing customers would subsidize the project; (2) a determination of the economic need for the pipeline; and (3) a balancing of the economic need against a discrete set of adverse impacts.[11] The Policy Statement further states that the Commission will look at "all relevant factors" to determine economic need. In practice, this is not what happens; instead, the Commission treats precedent agreements as dispositive in determining economic need. This "one-size-fits-all" approach contravenes the language of the Policy Statement and its stated intent to move the Commission away from reliance on precedent

---

[7] 15 U.S.C. § 717f(c).

[8] 15 U.S.C. § 717f(e).

[9] *Fed. Power Comm'n 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)).

[10] 15 U.S.C. § 717f(c).

[11] Policy Statement at 23–24.

agreements. This reliance also leads to market distortions that undermine—rather than support—the public interest.

Further, while the Commission is supposed to balance its economic need finding against a discrete set of factors to determine whether the project is in the public convenience and necessity, in practice, true balancing rarely (if ever) happens**.** Since the initiation of the Policy Statement, there has never been a project with precedent agreements in place that did not receive a certificate of public convenience and necessity.[12] Thus, the weight that the Commission places on precedent agreements has not only artificially narrowed the meaning of "need," but also has undermined the Policy Statement's intent to balance "need" against other important factors. The entire public interest determination has collapsed into the sole existence of precedent agreements.

This is not what the Policy Statement is meant to accomplish. Rather, to ensure that the Commission meets its statutory burden under the NGA, the Policy Statement wisely states that the Commission shall look at "all relevant factors" to determine whether the pipeline is needed.[13] The Policy Statement outlines a non-exhaustive list that includes precedent agreements, but also highlights factors such as energy demand projections, potential cost savings to consumers, and a comparison of purported demand with the amount of pipeline capacity currently serving the market. We agree with this approach,[14] as precedent agreements alone do not universally demonstrate whether there is an economic need.

[12] The two times that the Commission has rejected an application for a certificate of public convenience and necessity since 1999, the applicant presented no precedent agreements. *See Jordan Cove Energy Project, L.P.*, 154 FERC ¶ 61,190 (2016); *Turtle Bay Gas Storage Co., LLC*, 135 FERC ¶ 61,233 (2011).

[13] Policy Statement at 23.

[14] Additional factors, plus the examples the Policy Statement provides, should be considered, as discussed further herein. The comments of former state utility regulator and industry expert, Dr. Susan Tierney, filed in the instant docket, also address additional factors the Commission should consider. *See generally* Comments of Susan F.

But, we further suggest that the factors relevant to an overarching public interest determination are also broader than the discrete indicia enumerated in the balancing portion of the Policy Statement's three-part test. Here, too, the Commission must look at all relevant factors to determine whether a project is in the public interest.

Thus, while well-intended, the Policy Statement's three-step process has not worked in practice. To help solve this problem, we propose that all relevant factors, including the purported economic need and non-economic indicia, can be analyzed in tandem to determine whether there is a need for the pipeline such that public interest requires the awarding of a certificate. This includes the incorporation of environmental data collected through the Commission's reviews under NEPA and other statutes. This proposal is more in line with the spirit of the Policy Statement, statutory requirements, and the historical underpinnings of the NGA and the "public convenience and necessity" standard.

While relying solely on precedent agreements to justify granting a pipeline certificate always carries the risk of approving a pipeline that is not needed, this reliance is even more troubling given the increased use of affiliate precedent agreements. To be clear, we are not asking the Commission to decide whether a precedent agreement is "legitimate"—rather, we are asking the Commission to recognize that an arms-length transaction inherently has more probative value for demonstrating economic need than one created by related companies within the same corporate family. Specifically, affiliate precedent agreements "should be afforded little weight" due to "the potential for affiliates to attempt to exercise vertical market power by

Tierney, Ph.D. (July 25, 2018), Docket No. PL18-1-000 (July 25, 2018) (Tierney Comments). Dr. Tierney's comments were commissioned by the Natural Resources Defense Council.

establishing a justification for a new infrastructure project."[15] Thus, we ask the Commission to do the following: (1) affirmatively determine whether a contract is, in fact, an arms-length transaction or a contract between or among affiliates, and (2) if it is an affiliate agreement, apply less probative weight to that contract given its inherent intra-corporate nature.[16]

Further, while the Policy Statement explicitly states that it is intended to "strike the proper balance between the enhancement of competitive alternatives and the possibility of over building,"[17] too often, the Commission reviews each pipeline application in a vacuum, creating the risk of wasteful duplication and infrastructure that is out-of-step with the region's needs. An integrated, more comprehensive review could assess whether a new pipeline meets the public interest standard by considering the energy demands of the region(s) affected by the project. Such an assessment would examine factors such as existing and proposed pipeline capacity, long-term energy demand, and state policies that could affect future demand.

Place reasonable restrictions on private exercise of delegated power of eminent domain and clarify the important role the Commission must play to protect landowners. Pipeline applicants who receive a Commission certificate of public convenience and necessity frequently seek to exercise eminent domain authority to condemn properties in the pipeline path.[18] Private companies condemn family farms, homes, local businesses, and conservation lands. The

[15] Tierney Comments at 33.

[16] We disagree with the Commission's assessment that the "mere fact" that a precedent agreement is between or among affiliates "does not … diminish the showing of market support[.]" *Florida Southeast Connection, LLC*, 163 FERC ¶ 61,158, at P 23 (2008). We disagree because these agreements do not represent the product of an arms-length transaction.

[17] Policy Statement at 2; *see also Regulation of Short-Term Natural Gas Trans. Servs.*, Notice of Proposed Rulemaking, at 161 (July 29, 1998), Docket No. RM98-10-000.

[18] *See* Julie Grant, *Eminent Domain is Becoming a Crucial, Controversial Part of the Gas Pipeline Boom*, ALLEGHENY FRONT (Dec. 30, 2016), https://www.alleghenyfront.org/eminent-domain-is-becoming-a-crucial-controverisal-part-of-the-gas-pipeline-boom/; *see also* 15 U.S.C. 717f(h) (the eminent domain section of the NGA).

Commission must ensure that such lands are only taken when the public interest requires such a result. The Commission also must take measures to ensure that landowners do not prematurely lose their property rights to a project that may not be viable because applicable authorizations are pending, and therefore, the Commission's record of review is inherently incomplete.

In particular, the Commission must reform its practice of issuing certificates of public convenience and necessity conditioned on the pipeline applicant's receipt of other outstanding required authorizations.[19] Pipeline applicants use these conditional certificates to exercise eminent domain authority to forcibly take property for their projects. Applicants also use these conditional certificates to fell trees—with express authorization from the Commission. These takings and tree felling activities cause permanent environmental and economic damage.[20] And perversely, this damage may be all for naught because the outstanding required authorizations may require reroutes or outright denials. The risk of such a situation is not a hypothetical—this is real.[21] To avoid such needless damage in the future, we provide several recommendations below to update and improve the Commission's consideration of landowner interests in its certificate process.

---

[19] These are commonly referred to as "conditional certificates." *See, e.g.*, *Constitution Pipeline Co., LLC*, 149 FERC ¶ 61,199 (Dec. 2, 2014) (certificate issued while federal authorizations remained outstanding).

[20] *Constitution Pipeline Co., LLC*, Partial Notice to Proceed with Tree Felling and Variance Requests (Jan. 8, 2016), Docket No. CP13-399-000 (permitting tree felling in Pennsylvania when federal authorizations remained outstanding); *see also* Jon Hurdle, *A company cut trees for a pipeline that hasn't been approved. The landowners just filed for compensation*, STATEIMPACT (July 12, 2018), https://stateimpact.npr.org/pennsylvania/2018/07/12/a-company-cut-trees-for-a-pipeline-that-hasnt-been-approved-the-landowners-just-filed-for-compensation/ (noting that a Pennsylvania family that lost 588 trees for the Constitution Pipeline has filed a motion to dissolve the injunction granting Constitution access to their property).

[21] *See, e.g.*, *Constitution*, 149 FERC ¶ 61,199 (certificate issued while federal authorizations remained outstanding); *Constitution*, Partial Notice to Proceed with Tree Felling and Variance Requests; News Release, NYSDEC, *New York State Department of Environmental Conservation Denies Water Quality Certificate Required for Constitution Pipeline* (Apr. 22, 2016), http://www.dec.ny.gov/press/105941.html. This problem is compounded by the Commission's use of tolling orders, which allows a pipeline to undergo these activities for months while rehearing requests remain outstanding.

Fully evaluate climate pollution and other environmental impacts. The Commission's current approach minimizes the quantitative and qualitative relevance of direct, indirect, and cumulative environmental impacts, including the lifecycle GHG emissions and climate change implications resulting from its pipeline approvals. The Commission's recent decisions further undermine the robustness of its consideration of environmental impacts, both under NEPA and the NGA.[22] As noted by the U.S. Environmental Protection Agency (EPA) in the instant docket,[23] scientifically tested tools exist today that allow the Commission to monetize environmental impacts and neatly incorporate them into a public interest analysis. Further, as climate change "is the single most significant threat to humanity, fundamentally threatening our environment, economy, national security and human health," it is "difficult to understand how" the Commission can satisfy its "hard look" requirements under NEPA without using every available tool to consider all direct, indirect, and cumulative environmental impacts, including upstream and downstream effects.[24] Accordingly, we urge the Commission to incorporate full consideration of environmental and climatic impacts under its NGA public interest review and to use all available methods to conduct robust environmental impact analyses, as required by NEPA.

Ensure meaningful opportunities for public participation. To faithfully and impartially determine whether a project is in the public interest, the Commission must ensure that every stakeholder—regardless of resources—has meaningful opportunities to convey their interests and

[22] *See generally Dominion Transmission, Inc.*, Order Denying Rehearing, 163 FERC ¶ 61,128 (2018) (outlining a narrower consideration of environmental impacts than previously used); *Tennessee Gas Pipeline Co., L.L.C.*, Order Denying Rehearing and Dismissing Clarification, 163 FERC ¶ 61,190 (2018) (same).

[23] EPA Detailed Comments on FERC NOI for Policy Statement on New Natural Gas Transportation Facilities (June 21, 2018), Docket No. PL18-1-000.

[24] *Florida Southeast Connection, LLC*, 162 FERC ¶ 61,233, at 2-3 (2018) (Commissioner Glick, dissenting); *see also Town of Orangetown v. Gorsuch*, 718 F.2d 29, 35 (2d Cir. 1983), *cert. denied*, 465 U.S. 1099 (1984) (outlining the "hard look" standard under NEPA).

to participate in the certificate process. Robust public participation is paramount precisely because of the wide-ranging interests—and the insidious harms—associated with pipelines, including, but not limited to: the financial and emotional devastation due to forcibly taken property, the potential multi-billion-dollar losses due to overbuild, and the potentially even costlier damages due to climate change. Commissioners have recognized the importance of maintaining public confidence in the Commission's work.[25] Yet, DOE's recent audit found that the Commission is falling short in this regard and that steps can and should be taken to improve public participation.[26] Public confidence could be strengthened by holding hearings when there are disputed issues of material fact and through the creation and funding of an Office of Public Participation, which would support those impacted by a pipeline proposal who otherwise lack the ability to meaningfully participate in the Commission's review process. Ensuring meaningful public participation also includes developing deliberate, concrete methods to: (1) incorporate the voices of environmental justice communities as required by Executive Order 12,898 and (2) to consult and collaborate with all tribal communities.[27]

While government efficiency is important, a focus solely on the time spent reviewing certificate applications risks prioritizing speed over accuracy. Setting arbitrary timelines for

[25] See Commissioners LaFleur & Glick's comments in *DTE Midstream Appalachia, LLC*, 162 FERC ¶ 61,238, at 2 (2018) (Commissioners LaFleur & Glick, dissenting); *see also* Robert Walton, *New FERC Chair wants to make agency more transparent*, UTILITYDIVE (Dec. 21, 2017), https://www.utilitydive.com/news/new-ferc-chair-wantsto-make-agency-more-transparent/513605/.

[26] *See generally* Audit Report, *The Federal Energy Regulatory Commission's Natural Gas Certification Process*, DOE OFFICE OF INSPECTOR GENERAL (May 24, 2018), https://www.energy.gov/sites/prod/files/2018/05/f52/DOE-OIG-18-33.pdf.

[27] Exec. Order 12,898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 59 Fed. Reg. 32 (Feb. 16, 1994); *Guide on Consultation and Collaboration with Indian Tribal Governments and the Public Participation of Indigenous Groups and Tribal Members in Environmental Decision Making*, NAT'L ENVTL. JUSTICE ADVISORY COUNCIL, INDIGENOUS PEOPLE'S SUBCOMMITTEE (Nov. 2000), https://www.epa.gov/sites/production/files/2015-03/documents/ips-consultation-guide_0.pdf.

review—without taking into consideration the unique complexities of each project—further risks the Commission and its staff feeling pressured to prioritize meeting a deadline over completing their statutory duties. A Commission official has testified before Congress that the Commission already is efficient at processing pipeline applications.[28] While there is always room for improvement, and while we support improved collaboration among agencies tasked with assisting the Commission in its reviews, we suggest that the sufficiency—not the efficiency—of the Commission's review process is the problem. The Commission should focus its efforts on ensuring that it has a robust review process; afterwards, it can consider how to implement that robust process in the most efficient manner. It does not benefit anyone—be it landowners or pipeline applicants—for a project to be held up in protracted litigation because the Commission did not perform a thorough initial review.

II. PROCEDURAL BACKGROUND

FERC Chairman Kevin McIntyre announced that the Commission would revisit the Policy Statement on December 21, 2017.[29] The Commission issued the NOI on April 19, 2018.[30] Publication in the *Federal Register* established June 25, 2018, as the comment deadline.[31] The Commission then extended the comment deadline to July 25, 2018.[32]

---

[28] Terry Turpin, Director of FERC's Office of Energy Projects, has testified before Congress that the Commission's "natural gas review processes are thorough, efficient, and have resulted in the timely approval of interstate natural gas pipelines …. Since 2000, the Commission has authorized: nearly 18,000 miles of interstate natural gas transmission pipeline totaling more than 159 billion cubic feet per day of transportation capacity." Testimony of Terry L. Turpin, Director, Office of Energy Projects, Federal Energy Regulatory Commission, Before the U.S. House Subcommittee on Energy and Power of the Committee on Energy and Commerce, *Hearing on Legislation Addressing Pipeline and Infrastructure Modernization* at 3 (May 3, 2017).

[29] News Release, FERC, *FERC to Review its 1999 Pipeline Policy Statement* (Dec. 21, 2017), https://www.ferc.gov/media/news-releases/2017/2017-4/12-21-17.asp#.Wvxuw4gvyUl.

[30] *See generally* NOI.

[31] Certification of New Interstate Natural Gas Pipeline Facilities, 83 Fed. Reg. 18,020 (Apr. 25, 2018).

[32] *Certification of New Interstate Natural Gas Pipeline Facilities*, Order Extending Time for Comments, 163 FERC ¶ 61,138 (May 23, 2018), Docket No. PL18-1-000.

In his December 21, 2017 announcement, Chairman McIntyre observed that there have been significant changes in the energy landscape since 1999.[33] These changes include new areas of gas production, changes in directional flows, the increased use of long-term precedent agreements, gas-electric coordination, greater use of eminent domain, and improved knowledge about the impacts of gas infrastructure on climate change.[34] Given these shifts, Chairman McIntyre correctly determined that it was time for the Commission "to take another look"[35] at how the Commission assesses "the value and viability"[36] of interstate gas pipeline projects, to ensure "that the Commission continues to meet its statutory obligations[.]"[37] Accordingly, the NOI seeks stakeholder perspectives on whether the Commission should revise the Policy Statement and, if so, how the Commission should adjust: "(1) its methodology for determining whether there is a need for a proposed project, including the Commission's consideration of precedent agreements and contracts for service as evidence of such need; (2) its consideration of the potential exercise of eminent domain and of landowner interests related to a proposed project; and (3) its evaluation of the environmental impact of a proposed project."[38] The Commission also seeks input on whether the Commission could improve the efficiency of the certificate application process.[39] The NOI's stated purpose is to ensure that the Policy Statement meets its own defined goal: "to appropriately consider the enhancement of competitive

[33] *FERC to Review its 1999 Pipeline Policy Statement*, https://www.ferc.gov/media/news-releases/2017/2017-4/12-21-17.asp#.Wvxuw4gvyUl.

[34] NOI at P 2.

[35] *FERC to Review its 1999 Pipeline Policy Statement*, https://www.ferc.gov/media/news-releases/2017/2017-4/12-21-17.asp#.Wvxuw4gvyUl.

[36] *Id.*

[37] NOI at P 51.

[38] *Id.* at P 1.

[39] *Id.*

transportation alternatives, the possibility of over building, the avoidance of unnecessary disruption of the environment, and the unneeded exercise of eminent domain."[40]

The NOI spans four subjects: (A) Potential Adjustments to the Commission's Determination of Need; (B) The Exercise of Eminent Domain and Landowner Interests; (C) The Commission's Consideration of Environmental Impacts; and (D) Improvements to the Efficiency of the Commission's Review Process.[41] We address each subject below.

III. RESPONSES TO NOTICE OF INQUIRY

A. Potential Adjustments to the Commission's Determination of Need (A1-A10 and C6)[42]

1. *Factors to be Considered in Determining Need (A1-A2, A6-A8, A10)*

NOI Questions A1-A2, A6-A8, and A10 all probe at one core question: how should the Commission determine whether there is a need for a particular pipeline project under the NGA? To answer this question, it is critical to understand the origins of the term "public convenience and necessity" and what that review is supposed to entail, since the Commission only performs its economic need determination to inform its NGA public convenience and necessity review. The history is clear that the term "public convenience and necessity" means that the Commission is supposed to conduct a holistic review that considers economic factors in tandem with all other relevant factors, to empower the Commission to make an informed conclusion about whether a proposed project is needed and required by the public interest.

[40] *Id.* at P 3. The Policy Statement states the same purpose. *See id. See also* Policy Statement at 2.

[41] NOI at PP 52-60.

[42] Question C6 is addressed in this section since it relates to the interrelationship between NEPA and the NGA.

a. Historical Background

Overall, the purpose of a "public convenience and necessity" review is to undergo "an inquiry into whether there is a 'public need' for, or whether it would be in the 'public interest' to authorize, the new or expanded services proposed by the applicant."[43] Thus, a regulatory body charged with reviewing such applications shall not universally issue authorizations; rather, "the essence of a certificate of public convenience and necessity is the exclusion of otherwise qualified applicants from a market because, in the judgment of the regulatory commission, the addition of new or expanded services would have no beneficial consequences, or, in a more extreme case, would actually have harmful consequences."[44]

The Commission's authority under the NGA follows this same model. Under the NGA, the Commission "shall" issue a certificate of public convenience and necessity to a "qualified applicant," which is defined as an applicant that demonstrates that the "proposed service, sale, operation, construction, extension, or acquisition…is or will be required by the present or future public convenience and necessity,"[45] i.e., the public interest. As such, the Supreme Court has called the Commission "the guardian of the public interest in determining whether certificates of convenience and necessity shall be granted."[46]

Through the NOI, the Commission seeks input on what factors it should consider in its need-level analysis. The Supreme Court has made it clear that the Commission has wide

[43] William K. Jones, *Origins of the Certificate of Public Convenience and Necessity: Developments in the States, 1870-1920*, 79 COLUM. L. REV. 426, 427 (1979) (hereinafter Jones, *Origins*).

[44] *Id.* at 427.

[45] 15 U.S.C. § 717f(e).

[46] *Fed. Power Comm'n 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)).

discretion[47] and is not required to consider everything that may benefit the general welfare; rather, the Commission is required to consider those factors that are embedded within the principal purposes of the NGA, namely to oversee the orderly and proper development of energy infrastructure and to protect consumers.[48] For example, while the Supreme Court has concluded that preventing employment discrimination falls outside the Commission's authority, it has noted explicitly that evaluating environmental impacts of proposed projects, for example, is within the Commission's wheelhouse.[49] And the legislative history demonstrates that these types of factors can and should be incorporated into a robust NGA analysis.

As noted above, the Commission looks at economic need only as a byproduct of its requirement to determine whether a project is in the public convenience and necessity. As such, in determining how the Commission should look at need, it is helpful to look at what the term "public convenience and necessity" means. One of the first uses of the term occurred in Massachusetts at the end of the 19th century.[50] At that time, states—rather than the federal government—oversaw the approval of new railroad infrastructure. As noted by Columbia University law professor William Jones, the Massachusetts Board of Railroad Commissioners (Massachusetts Board) grew increasingly concerned that, upon receiving an application, it was

[47] *Transcon. Gas Pipeline Co.*, 365 U.S. at 7 (quoting *Detroit & Cleveland Navigation Co.*, 326 U.S. at 241).

[48] *Nat'l Assoc. of Colored People v. Fed. Power Comm'n*, 425 U.S. 662, 669-70 (1976); *Fed. Power Comm'n v. Hope Gas Co.*, 320 U.S. 591, 610 (1944); *Cal. Gas Producers Ass'n v. Fed. Power Comm'n*, 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 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.").

[49] *Nat'l Assoc. of Colored People*, 425 U.S. at 662, 669-70 & n.6; *see also Nat'l Assoc. of Colored People v. Fed. Power Comm'n*, 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 conservations "are the proper concern of the Commission.").

[50] Jones, *Origins* at 433–34.

required to approve **some** railroad route, regardless of whether it felt that the railroad was needed.[51] In 1882, the Massachusetts Board stated:

> It is said that no useless and needless railroad will be constructed because of the expense. But the history of railroad enterprises shows that needless and useless roads have been constructed from spite, from a desire to control or annoy other railroad companies, and still more frequently from a spirit of mad speculation…. **And yet we are to take the prudence of investors as an infallible guide, and as complete assurance that railroads will never be constructed unless they are needed.**[52]

From experience, the Massachusetts Board saw that investor demand was not synonymous with the public interest. It was concerned that—without additional protections—railroad applicants would be able to use investor interest as a *de facto* demonstration of need, despite concerns that other motivating factors could influence the investors' decisions, or that investor interest, standing alone, is not inherently a proxy for need. And yet, this is precisely how the Commission currently reviews NGA Section 7(c) gas projects. Currently, a pipeline applicant can, in practice, meet the "public interest" standard solely by presenting precedent agreements with prospective customer shippers. This is because the Commission treats precedent agreements as the "infallible guide" to economic need and because the existence of precedent agreements has supplanted the overall public interest review—since 1999, the Commission has never denied a project applicant that has precedent agreements—be they arms-length or with affiliated parties, and regardless of the percentage of the purported capacity subscribed to by those precedent agreements.

This was not, however, a satisfactory scenario for the Massachusetts legislature, which in 1882 amended its railroad permitting laws to state that the Massachusetts Board had to certify

[51] *Id.* at 434–35.

[52] *Id.* at 435 (quoting 13 Mass. Bd. of R.R. Comm'rs Ann. Rep. 26 (1882) (emphasis added)).

that the "public convenience and necessity require[d] construction of [the] railroad proposed."[53] Under this more rigorous system, the Massachusetts Board still approved most railroad projects. But, the new authority enabled it to reject projects that had failed to show that, when considering all relevant factors, the project was in the public interest.[54] For example, the Massachusetts Board denied a proposed project to build a railroad along a beachfront because the purported need for the train was "outweighed by the fact that the beach traversed" would "cease to be attractive when it is defaced and made dangerous by a steam railroad."[55] Similarly, the Massachusetts Board denied a certificate of public convenience and necessity to a project to extend an existing railroad by one mile into a resort area because the purported off-peak demand was not strong enough to offset the project's negative impacts.[56]

By 1892, New York also reframed its railroad reviews to include a "public convenience and necessity" standard.[57] During this time, the New York "courts were particularly negative about the construction of railroads paralleling existing roads where the available traffic would not support both.… Considerable emphasis was placed on protection of investors [of the original infrastructure] and on the harm to consumers of having to support, through increased transportation charges, a return on duplicative and unnecessary investment."[58] To be clear, this standard did not require disapproval of new projects that overlapped or competed with older

[53] *Id.* at 435–36 (quoting Act of May 26, 1882, ch. 265, 1882 Mass. Acts 208).

[54] *Id.* at 436.

[55] *Id.* at 436 (citing 18 Mass. Bd. of R.R. Comm'rs Ann. Rep. 110 (1887)).

[56] *Id.* (citing 18 Mass. Bd. of R.R. Comm'rs Ann. Rep. 110 (1887)).

[57] Act of May 18, 1892, ch. 676 § 59, 182-1 N.Y. Laws 1382; Jones, *Origins* at 440.

[58] Jones, *Origins* at 439.

infrastructure projects. Instead, such potentially duplicative projects had to demonstrate how they nevertheless could meet the "public convenience and necessity" standard.[59]

By the 1920s, the "public convenience and necessity" standard had been introduced in a variety of states and, critically, began to be added to reviews of gas projects.[60] Factors considered in these reviews included the avoidance of "wasteful duplication"[61] and the "social costs (or benefits) not reflected in the financial costs (or benefits)" of a proposed project,[62] including environmental damage, such as the "tearing up of streets or the erection of multiple sets of poles in order to provide multiple delivery of gas, electric, telephone, water, and related services."[63] States underwent a robust review where they considered all relevant factors, both economic and non-economic, in tandem, to determine whether the project was needed and required by the public interest. Critically, investor demand was not a universal proxy for need, and investor demand did not universally override the public interest review.

b. Transfer to Federal Authority and Early Commission Application

In the 1930s, Congress transferred infrastructure review authority from state to federal control through the Interstate Commerce Act, the Communications Act of 1934, the Motor Carriers Act of 1934, the Federal Power Act, and the NGA, among others.[64] There is no evidence in the NGA's legislative history that supports an intent to limit the phrase "public convenience and necessity" to mean less than how it had been interpreted for the previous 50 years. In fact,

[59] *Id.* at 441.

[60] *Id.* at 454.

[61] *Id.* at 501.

[62] *Id.* at 511.

[63] *Id.*

[64] 41 U.S.C. § 1 *et seq.*; 49 U.S.C. § 301 *et seq.*; 16 U.S.C. § 791a *et seq.*; 15 U.S.C. § 717 *et seq.*

much of the legislative history of the NGA relates to concerns about the federal government taking on what had historically been a state-level review; this further emphasizes that the NGA was not creating a new "public convenience and necessity" standard—it was transferring the previously existing standard from the states to the federal government.[65] In other words, it became the job of the Federal Power Commission (now FERC) to execute the previous duties of the states, meaning it was to undergo a holistic review that analyzed all relevant factors, economic and non-economic, in tandem, to determine whether a project was in the public convenience and necessity.

c. Examples of Gas Industry Support for a Holistic Approach

In the late 1990s, the Commission issued both a Notice of Inquiry and a Notice of Proposed Rulemaking related to its review of gas pipeline issues; these dockets later evolved into several policies, including the Policy Statement.[66] In these dockets, various industrial company commenters recognized that the Commission should conduct a holistic review that considers both economic and non-economic factors.

For example, Pacific Gas & Electric (PG&E), while overall favoring a policy that approved all projects meeting "minimum regulatory requirements," noted that the "standard for

[65] *E.g.*, *Hearing before the Committee of Interstate and Foreign Commerce on H.R. 4008 to Regulate the Transportation and Sale of Natural Gas in Interstate Commerce and for Other Purposes*, 75th Cong. 32 (1937) (Statement of Harry R. Booth, Acting Counsel for the Ill. Commerce Comm'n) (noting that Natural Gas Pipeline Company of America had indicated "to this committee that the regulation of interstate natural gas wholesale rates[] was not necessary because of the fact that in their opinion the States were adequately able to deal with the situation."); *see also Hearing before a Subcommittee of the Committee on Interstate and Foreign Commerce on H.R. 11662 to Regulate the Transportation and Sale of Natural Gas in Interstate Commerce and for Other Purposes*, 74th Cong. 80–81 (1936) (Statement of Andrew R. McDonald, Chairman, Committee on Legislation of the Nat'l Assoc. of Railroad and Utilities Comm'ns) (noting the historic role of the states in permitting gas pipelines).

[66] *Regulation of Interstate Natural Gas Trans. Servs.*, Notice of Inquiry (July 29, 1998), Docket No. RM98-12-000; *Regulation of Short-Term Natural Gas Trans. Servs.*, Notice of Proposed Rulemaking (July 29, 1998), Docket No. RM98-10-000.

deciding whether a project is justified by the public convenience and necessity should include factors such as whether the proposed project is designed to serve a market that already has existing excess capacity or whether it is designed to serve new or constrained markets, the firmness of market commitments, and environmental and property rights issues."[67]

Enron's Interstate Pipelines division also acknowledged the "need for the Commission to consider the impacts on landowners and the environment."[68] Similarly, Enron Capital & Trade Resources Corporation (ECT) stated that:

> [I]t is in ECT's interest as a large shipper and supplier of natural gas to have pipelines build new facilities when necessary to serve market demand. It is also in our interest to foster competition in as many markets as possible. Multiple parties competing against each other for service can increase grid flexibility and provide tangible benefits for consumers, shippers and suppliers**. However, not all new projects can be constructed without environmental impacts or external economic impacts. For example, the environmental harm caused by new pipe passing through new rights of way could outweigh the public interest in increased competition. Similarly, if new pipeline is constructed not to serve expanding markets, but to compete for existing business currently served by an existing pipeline with expiring contracts, the public interest may not justify the construction of the new project due to the creation of stranded assets on the existing pipeline**. Again, the Commission will have to determine whether the stranded cost outweighs the benefits of increased competition.[69]

These comments likely influenced the creation of the Policy Statement's well-intended, but flawed, public interest balancing analysis.

[67] Comments of the PG&E Corp. at 20 (Apr. 22, 1999), Docket Nos. RM98-10-000; RM98-12-000.

[68] Comments of Enron Interstate Pipelines at 50–53 (Apr. 22, 1999), Docket Nos. RM98-10-000; RM98-12-000.

[69] Initial Comments of Enron Capital & Trade Resources Corp. at 15–16 (Apr. 22, 1999), Docket Nos. RM98-10-000; RM98-12-000 (emphasis added).

d. The "All Relevant Factors" Approach

In 1999, the Commission debuted the "all relevant factors" approach for determining economic need. The well-intended purpose of the "all relevant factors" approach was for the Commission to depart from its universal dependence on precedent agreements to demonstrate economic need.[70] Specifically, the Commission said:

> **Rather than relying only on one test for need, the Commission will consider all relevant factors reflecting on the need for the project.** This might include, but would not be limited to, precedent agreements, demand projections, potential cost savings to consumers, or a comparison of projected demand with the amount of capacity currently serving the market. The objective would be for the applicant to make a sufficient showing of the public benefits of its proposed project to outweigh any residual adverse effects[.][71]

Thus, the Commission realized that, although precedent agreements are relevant, **they should not be dispositive in determining economic need.** But, as it stands, the intentionally fluid language of the Policy Statement—a fluidity that was meant to empower the Commission to consider factors beyond precedent agreements, or even beyond the examples posed in the Policy Statement—is now being used to support that the Commission does not have to consider anything **except** for precedent agreements to determine economic need.[72]

---

[70] *See, e.g.*, Policy Statement at 16 (noting that projects that may benefit the public interest are being excluded due to rigid dependence on precedent agreements); *see also id.* ("The amount of capacity under contract also is not a sufficient indicator by itself of the need for a project, because the industry has been moving to a practice of relying on short-term contracts, and pipeline capacity is often managed by an entity that is not the actual purchaser of the gas. Using contracts as the primary indicator of market support for the proposed pipeline project also raises additional issues when the contracts are held by pipeline affiliates. Thus, the test relying on the percent of capacity contracted does not reflect the reality of the natural gas industry's structure and presents difficult issues.").

[71] Policy Statement at 23 (emphasis added); *see also* Tierney Comments at 25–28.

[72] *E.g.*, *Florida Southeast Connection, LLC*, 163 FERC ¶ 61,158, at P 22 (2018) ("The Commission found that that Florida Southeast had sufficiently demonstrated a market demand for the Florida Southeast pipeline based on the precedent agreement with Florida Power & Light." There is no mention of any other factors or a market study being discussed); *Texas Eastern Transmission, LP*, 163 FERC ¶ 61,020, at P 22 (2018) ("Moreover, we find that Texas Eastern has sufficiently demonstrated that there is market demand for the project. Texas Eastern has entered into a long-term, firm precedent agreement with Toshiba for 100 percent of the system's capacity." There is no discussion of any other factors or a market study being discussed).

The Commission's reliance on precedent agreements distorts more than the economic need portion of the current review process; it also has overtaken the Policy Statement's balancing test. Through the balancing test, the Commission was trying to set up a system that required it to balance the applicant's purported economic need against other relevant indicia. In practice, however, it is questionable whether the balancing test has had any effect. Since the Commission issued the existing Policy Statement—the Commission has **never** denied an application with precedent agreements in place. Specifically, the Commission has approved all but two of over 400 pipeline applications filed with the Commission since the Policy Statement was adopted, and the two that were rejected did not include precedent agreements. Today's approach does not amount to a robust administrative review and is a major reason why the Commission is criticized for being merely a bump in the road as opposed to being the "guardian of the public interest."[73]

In *Sierra Club v. FERC*,[74] which the Commission has cited to justify its reliance on precedent agreements,[75] the D.C. Circuit stated that the "public convenience and necessity" standard has been understood to have two components: market need and the balancing of market need against other factors.[76] We agree. A holistic review that looks at the purported economic need and other relevant factors is required under the NGA. However, this is not what happens. Rather, the Commission determines that there are precedent agreements and that those

[73] *Fed. Power Comm'n 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 Commission is aware of this criticism. *See, e.g.*, Josh Siegel, *FERC Chairman seeks to overcome 'rubber stamp' label*, WASH. EXAMINER (Feb. 13, 2018), https://www.washingtonexaminer.com/ferc-chairman-seeks-to-overcome-rubber-stamp-label.

[74] 867 F.3d 1357 (D.C. Cir. 2017).

[75] The Commission cites to the market need component of the review. *E.g.*, *Mountain Valley Pipeline, LLC*, Order on Rehearing, 163 FERC ¶ 61,197, at P 36 n.87 (2018) (citing *Sierra Club*, 867 F.3d at 1379 (finding that it was not arbitrary or capricious for the Commission to find economic need from the precedent agreements presented)).

[76] *Sierra Club*, 867 F.3d at 1379.

agreements universally demonstrate economic need, and then the presence of those precedent agreements is always enough to override the limited types of adverse impacts considered by the Commission. As such, precedent agreements have not only become a proxy for economic need, but for the entire public interest standard under the NGA. This is a critical reason why we are proposing a revised approach, one that considers the purported economic need and all other relevant factors in tandem. This will ensure that relevant factors other than the purported economic need will get considered. This approach would better exercise the underlying intent of the Policy Statement and better support the Commission's duties under the NGA.

e. Consideration of End-Uses and Existing Capacity

The Commission asked whether it should consider the ability for pre-existing capacity to satisfy the purported economic need in its NGA reviews. The answer is yes. If there is existing capacity that appears to satisfy the purported economic need, the burden should be on the applicant to explain why those existing options are not sufficient. To be clear, the presence of precedent agreements does not answer whether the public interest is best served by the addition of the proposed project. But a prospective shipper presumably enters into a precedent agreement either because they see an economic need that is unable to be satisfied by the current market or because it benefits them in some other way. **Either way, the reason for entering into the contract is known**. And if the customer-shipper knows why it entered into the precedent agreement, then the pipeline applicant can know it, too, which means the Commission can know it as well, and can consider it within their review. As Commissioner LaFleur recently stated, the Commission can ask the applicant to have its precedent shippers outline why it chose to subscribe to new capacity as opposed to existing capacity and to provide that information to the

Commission.[77] While the Commission must weigh the persuasiveness of this evidence given the source, such information could be useful to a holistic review. The applicant could provide this information through the Resource Reports developed during pre-filing and filed upon formal application with the Commission.

The Commission should also consider the end-use for the gas that would be transported by a proposed project.[78] As above, while the end-use may change over time, presumably there is a reason why a precedent shipper entered into the precedent agreement **now**. While the Commission should not consider these actions as dispositive—and should also consider any inconsistencies between the length of the precedent agreement and the life of the pipeline, given stranded asset risks—the Commission should incorporate these considerations into its review.

Some have argued against a more faithful execution of the NGA because it requires the Commission to weigh the probative value of a greater volume of evidence. The Commission is fully qualified to execute this task. As the Commission recognized in 1938, any definition of the term "public convenience and necessity" "must fundamentally have reference to the facts and circumstances of each given case as it arises."[79] This interpretation is consistent with how states had been interpreting their public interest responsibilities for the 50 years before Congress passed the NGA. State commissions looked at the individual circumstances, reviewed all relevant factors, and used their best judgments to decide whether a project was needed and

[77] *Dominion Transmission, Inc.*, Order Denying Rehearing, 163 FERC ¶ 61,128, at 5 (2018) (Commissioner LaFleur, dissenting in part).

[78] For a greater discussion, see Tierney Comments at 40–46.

[79] *In the Matter of Kansas Pipe Line & Gas Co. and North Dakota Consumers Gas Co.*, 2 F.P.C. 29, 56 (1939) (citation omitted).

required by the public interest.[80] We strongly believe that the 2018 Commission can accomplish the same level of depth of review executed by the 1882 Massachusetts Board.

In practice, the Policy Statement has not effectively executed the Commission's duties under the NGA. The project's purported economic need is a relevant factor in determining whether the pipeline should be granted a certificate of public convenience and necessity. But, it is not the **only** relevant factor. The problem with the Commission's current review process is that it essentially assumes that if precedent agreements are in place, the project is universally needed, and that the need is so persuasive such that no adverse impact can outweigh it. Thus, we propose a new approach whereby the project's purported economic need is analyzed in tandem with all other relevant factors. We believe that such an approach would better accomplish what the Commission was trying to institute when it created the Policy Statement.

2. *The Intersection Between NEPA and the NGA (C6)*

In Question C6, the Commission asks whether it should change how it weighs environmental impacts in its NGA balancing analysis. As noted above, we support a revised framework that eliminates the current balancing test and replaces it with a holistic "all relevant factors" review. Environmental factors are a key element of the Commission's "all relevant factors" review and have been part of these analyses since the inception of the public convenience and necessity framework. The Commission obtains some of its most complete information about a pipeline's environmental impacts through its review under NEPA. It is difficult to understand how the Commission can make a thorough need and public interest

[80] In fact, the definition of "public interest" has only grown over time. For example, our societal understanding of the public interest now also includes protection of clean water and clear air, considerations that were not part of the 1880s reviews.

determination under the NGA without a consideration of the environmental impacts revealed during the Commission's NEPA reviews, including a project's potential impacts on water, air, emissions, and climate. To do this effectively, however, the Commission must also revitalize its NEPA reviews. These recommendations are discussed in Section III.C, *infra*.

3. *Misplaced Sole Use of Precedent Agreements to Support Claims of Need for New Pipelines (A3-A5)*

In Questions A3-A5, the Commission seeks feedback on its use of precedent agreements to demonstrate economic need. By relying only on precedent agreements to support need, the Commission fails to meaningfully assess economic need and places customers at risk of paying for unneeded pipeline capacity. The Commission thus fails in executing one of its main duties under the NGA, which is to protect consumers.[81] We urge the Commission to broaden its economic need considerations beyond sole reliance on precedent agreements, and to place even less probative weight on those agreements between or among corporate affiliates. Absent this review, the Commission's decision-making will not be consistent with the public interest.

a. <u>The Commission's Sole Reliance on Precedent Agreements in Support of Need is Inconsistent with the Requirements of the NGA</u>

Under Section 7(e) of the NGA, the Commission can approve new pipeline construction only if the project "is or will be **required** by the present or future **public** convenience and necessity[.]"[82] A key component of that determination is whether the project is needed.

[81] *Fed. Power Comm'n v. Hope Gas Co.*, 320 U.S. 591, 610 (1944); *Cal. Gas Producers Ass'n v. Fed. Power Comm'n*, 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 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.").

[82] 15 U.S.C. § 717f(e) (emphasis added).

The legislative history of the NGA illustrates that the Commission is meant to examine various factors in determining economic need. Under the original Section 7(c), pipeline companies were free to build pipelines to new markets, without certification—only companies proposing to serve a market already served by a different pipeline were required to obtain a certificate. Due to concerns about potential pipeline overbuild (among other factors), in 1942, Congress amended the NGA to expand the certificate requirement to all new pipeline construction. The House committee report on the amendments explained the harms of insufficient regulation and the effect the change would have on the Federal Power Commission (now FERC)'s review:

> By the unregulated construction of a pipe line, uneconomic construction, or inflated costs may make proper regulations of operation thereafter difficult or practically impossible. **The bill when enacted will have the effect of giving the Commission an opportunity to scrutinize the adequacy of the gas reserve, the feasibility and adequacy of the proposed services, and the characteristics of the rate structure** in connection with the proposed construction or extension at a time when such vital matters can readily be modified as the public interest may demand. **Without such authority, the Commission may find itself confronted with a situation where it must either accept conditions which appear undesirable in the public interest**, or require, subsequent to construction, changes which may have much more serious practical consequences than they would have had if they had been made before the public was asked to finance the enterprise.[83]

Similarly, the Senate committee report noted concern about avoiding "waste, uneconomic and uncontrolled extensions."[84] The Senate committee concluded that "[t]he present bill would correct this glaring inadequacy of the act. **It would also authorize the Commission to examine**

[83] H.R. Rep. No. 77-1290 at 2-3 (1941) (emphasis added).

[84] Senate Committee on Interstate Commerce, S. Rep. No. 948, 77th Cong., 2d Sess. 1-2 (1942).

costs, finances, necessity, feasibility, and adequacy of proposed services. The characteristics of their rate structure could be studied."[85]

In the NOI, the Commission notes that its "powers under NGA section 7 are limited."[86] While this is true, the Commission's current, overly-constrained scope of review—which treats precedent agreements as *de facto* evidence of economic need—is a self-imposed limitation without basis in the NGA. Further, the Commission's unduly narrow review creates the risk of pipeline overbuild, market distortion, and other attendant harms, thereby undermining the Commission's ability to fulfill its consumer protection duty under the NGA.

b. The Commission's Sole Reliance on Precedent Agreements as a Proxy for Need Contradicts the Language and Intent of the Policy Statement

In addition to being inconsistent with the NGA, the Commission's current review approach is also inconsistent with the clear intent in the Policy Statement to move away from reliance on precedent agreements as demonstrative of economic need. In adopting the Policy Statement, the Commission included its exclusive reliance on precedent agreements among the "[d]rawbacks of the [c]urrent [p]olicy[.]"[87] As such, the Commission sought to end its policy of "us[ing] the percentage of capacity under long-term contracts as the only measure of the demand for a proposed project."[88] Instead, the Commission announced a new policy wherein "[r]ather than relying only on one test for need, the Commission **will consider all relevant factors** reflecting on the need for the project."[89]

[85] *Id.* (emphasis added).

[86] NOI at P 8.

[87] Policy Statement at 16.

[88] *Id*.

[89] *Id.* at 23 (emphasis added).

In practice, however, the Commission acknowledges that it "has not looked beyond contracts for a further determination of market or supply need."[90] In case after case, the Commission has concluded that the existence of precedent agreements—alone—is the "best evidence" of economic need for new pipeline construction. And, upon making this finding of economic need, since 1999, the Commission has universally approved pipeline applications with precedent agreements in place. This sole reliance on the existence of precedent agreements has compressed the public interest analysis into an evaluation only of whether precedent agreements exist.[91]

Perhaps to justify the inconsistency between this reliance and the Policy Statement, the NOI now seems to characterize the "all relevant factors" approach as being optional and driven by what pipeline developers choose to submit as evidence of economic need. According to the NOI, "[t]he Policy Statement adopted a new approach, under which the Commission **would allow** an applicant to rely on a variety of ... factors to demonstrate need. **In practice, applicants have generally elected to present, and the Commission has accepted**, customer commitments as the principal factor in demonstrating project need."[92] Both the Policy Statement and the record belie this re-framing. As noted above, the Policy Statement states that the Commission "**will**

[90] NOI at 35.

[91] The determination is so common that the language discussing it has become formulaic. *See, e.g.*, *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at P 41 (2017) ("We find that the contracts entered into by the shippers are the best evidence that additional gas will be needed in the markets that the MVP and Equitrans Expansion Projects are intended to serve."); *Atlantic Coast Pipeline, LLC*, 161 FERC ¶ 61,042, at P 55 (2017) ("We find that the contracts entered into by those shippers are the best evidence that additional gas will be needed in the markets that the ACP Project intends to serve.").

[92] NOI at 32 (emphasis added).

consider all relevant factors[.]"[93] Further, the Policy Statement explicitly recognizes that the Commission had been too reliant on precedent agreements to demonstrate economic need:

> Although the Commission traditionally has required an applicant to present contracts to demonstrate need, that policy no longer reflects the reality of the natural gas industry's structure, nor does it appear to minimize the adverse impacts on any of the relevant interests. Therefore, although contracts or precedent agreements always will be important evidence of demand for a project, the Commission will no longer require an applicant to present contracts for any specific percentage of the new capacity. Of course, if an applicant has entered into contracts or precedent agreements for the capacity, it will be expected to file the agreements in support of the project, and they would constitute significant evidence of demand for the project.[94]

The Commission unequivocally found that "[t]the amount of capacity under contract also is not a sufficient indicator by itself of the need for a project."[95] It further determined that "[t]he amount of evidence necessary to establish the need for a proposed project will depend on the potential adverse effects of the proposed project on the relevant interests.... However, **the evidence necessary to establish the need for the project will usually include a market study**."[96]

Some in the industry likewise acknowledged, at the time the Policy Statement was issued, the risks in exclusively relying on precedent agreements to demonstrate need.[97] For example, El

---

[93] Policy Statement at 23.

[94] *Id.* at 25.

[95] *Id.* at 16. The Commission explained this is so "because the industry has been moving to a practice of relying on short-term contracts" and "additional issues" are raised "when the contacts are held by pipeline affiliates." *Id.* The Commission also noted that "reliance solely on long-term contracts to demonstrate demand does not test for all the public benefits that can be achieved by a proposed project." *Id.*

[96] *Id.* at 25 (emphasis added).

[97] *Id.* at 2. The Commission opens the Policy Statement referencing its exploration of issues in various dockets, and states that "[i]nformation received in these proceedings as well as recent experience evaluating proposals for new pipeline construction persuade us that it is time for the Commission to revisit its policy for certificating new construction." *Id.* (citing *Regulation of Interstate Natural Gas Trans. Servs.*, Notice of Inquiry (July 29, 1998), Docket No. RM98-12-000; *Regulation of Short-Term Natural Gas Trans. Servs.*, Notice of Proposed Rulemaking (July 29, 1998), Docket No. RM98-10-000). In the Policy Statement, the Commission also notes that it "held a public conference in Docket No. PL99-2-000 on the issue of anticipated natural gas demand in the northeastern United States over the next two decades, the timing and the type of growth, and the effect projected growth will have on existing pipeline capacity." Policy Statement at 1. The cited rulemaking

Paso Natural Gas Company stated that the "Commission should look behind all precedent agreements to assure that there is actual need in the market for new capacity."[98] As noted above, while relevant, no one factor can or should be universally dispositive in determining need.

c. Sole Reliance on Affiliate Precedent Agreements Presents Heightened Risks to Interests the Commission is Required to Protect

The concerns about precedent agreements being treated as a proxy for economic need become even greater when the agreements are between or among corporate affiliates. This, too, has been long acknowledged by some industry stakeholders. For instance, Amoco Energy Trading Corporation commented in 1999 that

> [u]nder this 'let the market decide' policy, the Commission has not distinguished between precedent agreements with pipeline affiliates as contrasted with non-affiliates, nor has the Commission questioned whether the demand was incremental to the interstate pipeline grid, or whether it involved demand currently being served by other pipelines. This failure to scrutinize the underpinnings of the certificate applications has not provided sufficient protection against over-building.[99]

Similarly, Enron Interstate Pipelines stated that:

> We believe that there is a fair issue about the adequacy of market support that is backed solely by contracts with pipeline marketing affiliates. We suggest that the Commission adopt a guideline that at least 25 percent of a project be backed by non-affiliated shippers to justify moving forward with an application, and 75

---

and notice of inquiry proceedings culminated in Order No. 637, which revised the Commission's regulations regarding gas pipeline pricing policy, scheduling procedures, capacity segmentation and other aspects of gas transportation service. *See Regulation of Short-Term Natural Gas Trans. Servs.*, FERC Stats. & Regs. Regulations Preambles (July 1996-December 2000) ¶ 31,091 (2000) (Order No. 637), *order on reh'g*, Order No. 637-A, FERC Stats. & Regs, Regulations Preambles (July 1996- December 2000) ¶ 31,099 (2000) (Order No. 637-A) and Order No. 637-B, 92 FERC ¶ 61,062 (2000) (Order No. 637-B), *aff'd in part and remanded in part*, *Interstate Natural Gas Ass'n of Am. v. FERC*, 285 F.3d 18 (D.C. Cir. Apr. 5, 2002*), order on remand*, 101 FERC ¶ 61,127 (2002).

[98] Comments of El Paso Natural Gas Company at 36 (Apr. 22, 1999), Docket Nos. RM98-10-000; RM98-12-000.

[99] Initial Comments of Amoco Energy Trading Corp. at 74 (Apr. 22, 1999), Docket No. RM98-12-000.

> percent of the project be backed by non-affiliated shippers to avoid a more rigorous showing of the underlying markets.[100]

In response to these comments, the Policy Statement recognizes that "[u]sing contracts as the primary indicator of market support for the proposed pipeline project raises additional issues when the contracts are held by pipeline affiliates."[101] But, the Commission nonetheless treats affiliate and arms-length precedent agreements as equally probative for economic need. There is inherently less probative value in an affiliate transaction than in an arms-length transaction, as there is a heightened risk that the contract was entered into for reasons other than economic need.[102] The counterparties are essentially the same, and, absent proper protections, self-dealing can occur.

i. *Affiliate-Utility Precedent Agreements Place Consumers at Risk*

Even more troubling, however, is the increasing trend to not only rely on affiliate precedent agreements, but to rely on affiliate precedent agreements between a pipeline developer and an affiliate that is a utility or part of a utility holding company structure.[103] This is even more risky for consumers than a traditional affiliate agreement because when the buyer of pipeline capacity is a monopoly utility or part of a monopoly utility holding company structure where utility customers cannot choose their energy provider, the captive customers pay for the pipeline,

[100] Comments of Enron Interstate Pipelines at 50–53 (Apr. 22, 1999), Docket Nos. RM98-10-000; RM98-12-000 (emphasis added).

[101] Policy Statement at 16.

[102] Commissioner Glick has recognized this explicitly, noting that while precedent agreements "are one of the several measures for assessing the market demand for a pipeline, contracts among affiliates may be less probative of that need because they are not necessarily the result of an arm's length negotiation." *PennEast Pipeline Co., LLC*, 162 FERC ¶ 61,053, at 1–2 (2018) (Commissioner Glick, dissenting).

[103] Commission proceedings involving such precedent agreements include the following. *E.g., id. See also Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043 (2017); *Atlantic Coast Pipeline, LLC*, 161 FERC ¶ 61,042 (2017); *NEXUS Gas Transmission, LLC*, 160 FERC ¶ 61,022 (2017); *Florida Southeast Connection, LLC*, 154 FERC ¶ 61,080 (2016); *Spire STL Pipeline LLC*, Docket No. CP17-40-000.

regardless of whether there is ever true economic need. Thus, despite the pipeline companies' assertions that they alone face the risks of an uneconomical project, under this model of pipeline financing and utility revenue generation, retail ratepayers are stuck with the bill, as both the pipeline-affiliated utilities and the pipeline can typically recover their costs[104] and reap lucrative profits through Commission-approved rates of return. As N. Jonathan Peress of the Environmental Defense Fund explained:

> As it stands, we are seeing a disturbing trend of utilities pursuing a capacity expansion strategy by imposing transportation contract costs on state-regulated retail utility ratepayers so that affiliates of those same utilities can earn shareholder returns as pipelines developers. In the last three years, a dozen or more utility holding companies have entered into affiliate transactions whereby the retail utility affiliate commits to new long term capacity with its pipeline developer affiliate. The essence of this financing structure is to take a cost-pass-through for a retail gas or electric distribution utility – a contract for natural gas transportation services – and pay those transportation fees to an affiliated pipeline developer entitled to accrue return on its investment from the same revenue. Thus ratepayer costs which may not be justified by ratepayer demand are being converted into shareholder wealth.[105]

When the Commission adopted the Policy Statement 19 years ago, utility holding companies and their subsidiaries were not as free to invest in ventures unrelated to their core utility business or outside of a circumscribed geographic area, due to the strictures of the Public Utility Holding

[104] Even where a state commission can disallow cost recovery, and without accounting for the differing kinds of state authority or the potential for litigation regarding the prudence of a utility's decision to enter into a long-term pipeline capacity agreement, in practice, cost recovery of pipeline costs is likely the norm. Moreover, any cost recovery disallowance comes after full buildout and operation of a pipeline, thus the cost disallowance avenue does not prevent an uneconomic pipeline project from being developed—along with all of its attendant economic risks and environmental harms.

[105] Testimony of N. Jonathan Peress, Director of Air Policy, Environmental Defense Fund, Before the Senate Energy and Natural Resources Committee, *Oil and Gas Pipeline Infrastructure and the Economic, Safety, Environmental, Permitting, Construction, and Maintenance Considerations Associated with that Infrastructure* at 5, (June 14, 2016), https://www.energy.senate.gov/public/index.cfm/files/serve?File_id=51079A26-DD96-4FB5-8486-411C8A7F9024.

Company Act of 1935 (PUHCA).[106] PUHCA's repeal in 2005[107] helped facilitate today's trend of utility holding companies partnering with pipeline developers and investing in pipelines. Absent the limits of the single integrated system and non-related business requirements of PUHCA, utility holding companies are freer to invest in non-core businesses. Consumer protections against captive utility customer cross-subsidization of more risky investments are largely left up to the states, and state laws are not uniform.

The lure of lucrative profits on pipeline investments is a key driver of this investment strategy. The Commission's allowance of a 14 percent return on equity for pipeline investments is a much higher profit margin than regulated utilities receive for other capital intensive investments such as electric transmission—up to 40 percent higher, according to one report.[108] State public service commissions on average grant utilities a 9.92 percent return on equity.[109] Pipeline projects are particularly attractive to utilities operating under the traditional utility business model where a utility's realized revenue is dependent on the level of electricity sales. Under traditional regulation, the utility has a strong incentive to preserve and, better yet, increase sales volumes to increase profits and shareholder well-being. However, demand for electricity has flattened and even declined in recent years due to structural changes in the economy, improved efficiency, and new customer-side distributed energy technologies,[110] all of which

[106] 15 U.S.C. § 79a *et seq.* (repealed 2005).

[107] *Id.*

[108] *Art of the Self-Deal: How Regulatory Failure Lets Gas Pipeline Companies Fabricate Need and Fleece Ratepayers* at 6, OIL CHANGE INTERNATIONAL (Sept. 2017) (hereinafter Art of the Self Deal).

[109] Cathy Kunkel & Tom Sanzillo, *Risks Associated with Natural Gas Pipeline Expansion in Appalachia: Proposed Atlantic Coast and Mountain Valley Pipelines Need Greater Scrutiny* at 8, INST. FOR ENERGY ECON. & FIN. ANALYSIS (Apr. 2016), http://ieefa.org/wp-content/uploads/2016/04/Risks-Associated-With-Natural-Gas-Pipeline-Expansion-in-Appalachia-_April-2016.pdf (hereinafter IEEFA Report).

[110] "EIA data show that since 2001, overall retail sales of electricity have risen by less than 11 percent. However, between 2007 and 2015, there was no growth in overall retail electricity sales. Slight growth among retail and commercial users was offset by a decline in sales to industrial users. This flattening of growth since

have put pressure on utilities to seek new sources of investment to grow their rate base and revenue requirements to provide greater shareholder wealth.[111] The high cost of new gas pipeline construction and associated new gas generation fits this bill. So long as these projects receive Commission approval, captive retail ratepayers will pay for these capital intensive and long-lived pipeline assets through their rates for decades to come.

> [The Commission-approved] high return provides an incentive for utility holding companies and gas producers to enter into the pipeline business, especially as utilities face stagnant or declining revenues from electricity sales. It also incentivizes the building of new infrastructure over the efficient use of existing pipelines, which have been paid off by previous ratepayers.[112]

While the Policy Statement recognizes the need to protect the interests of captive ratepayers of existing pipelines when new pipelines are built,[113] the captive ratepayers of monopoly utilities that are affiliated with a new pipeline developer are also at risk. This additional category of captive ratepayers must also be protected from undue pipeline costs.

2007 is rooted in the recession of 2007–2009, and in the rise in energy prices since 2007. These factors prompted many customers to conserve, become more energy efficient, purchase power directly from a third-party supplier, or produce their own power. As utilities are becoming less centralized, these factors will have a continuing and long-term impact on demand growth, which has led utilities to search for new sources of revenue to grow their business." Robert Rapier, *New Sources of Revenue: What Will Generate Growth for Utilities?*, GENERAL ELECTRIC (Jan. 31, 2017), https://www.ge.com/power/transform/article.transform.articles.2017.jan.new-sources-of-revenue-what-wi#; *see also* David Roberts, *After rising for 100 years, electricity demand is flat. Utilities are freaking out*, VOX (Feb. 27, 2018), https://www.vox.com/energy-and-environment/2018/2/27/17052488/electricity-demand-utilities ("Thanks to a combination of greater energy efficiency, outsourcing of heavy industry, and customers generating their own power on site, demand for utility power has been flat for 10 years, and most forecasts expect it to stay that way. The die was cast around 1998, when GDP growth and electricity demand growth became 'decoupled.'").

[111] Robert Rapier, *New Sources of Revenue: What Will Generate Growth for Utilities?*. https://www.ge.com/power/transform/article.transform.articles.2017.jan.new-sources-of-revenue-what-wi#.

[112] Art of the Self Deal at 6.

[113] Policy Statement at 19–22 (outlining the Commission's "no subsidy" requirement); *see also Regulation of Short-Term Natural Gas Trans. Servs.*, FERC Stats. & Regs. Regulations Preambles (July 1996-December 2000) ¶ 31,091 (2000) (Order No. 637), *order on reh'g*, Order No. 637-A, FERC Stats. & Regs, Regulations Preambles (July 1996- December 2000) ¶ 31,099 (2000) (Order No. 637-A); Order No. 637-B, 92 FERC ¶ 61,062 (2000) (Order No. 637-B), *aff'd in part and remanded in part*, *Interstate Natural Gas Ass'n of Am. v. FERC*, 285 F.3d 18 (D.C. Cir. Apr. 5, 2002*), order on remand*, 101 FERC ¶ 61,127 (2002).

The inherent risks of abuse in affiliate arrangements are well recognized in the realm of energy policy, and Commission regulation to prevent affiliate self-dealing is commonplace.[114] For example, the Commission prohibits pipelines favoring affiliates that are gas marketers or producers[115] and requires standards of conduct for both the gas and electricity industry regarding affiliate information sharing and separation of employees.[116] Commission Order No. 637 further "expresse[s] concern about market power implications of vertical integration between pipelines and [local distribution companies (LDCs)], and between pipelines and electricity generators."[117] But, these recognitions do not expressly address pipeline relationships with affiliates that are part of monopoly utility holding company systems. As such, captive ratepayers of monopoly utilities

[114] "In other segments of the Commission's work, the agency is a sophisticated supervisor of questions of market power, both horizontal and vertical market power. FERC has a history of exercising vigilance to address the risk that affiliates will exercise vertical market power in providing non-affiliated parties with non-discriminatory access to needed delivery facilities (e.g., electric and gas transmission). The Commission has taken countless steps over the years to structure its regulatory policies and supervision of the industry to mitigate the potential adverse impacts on customers and on competition. The Commission should bring the same perspective to its certification of new gas facilities in light of their very-long-lived nature, the risk of overbuilding, and an approval process that may well lead to subsequent court proceedings in which private property can be condemned for public purposes." Tierney Comments at 34–35.

[115] *Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Order No. 436, FERC. Stats. & Regs. 30,665, *order on reh'g*, Order No. 436-A, FERC. Stats. & Regs. ¶ 30,675 (1985), *order on reh'g*, Order 436-B, [Regs. Preambles 1986-90] FERC Stats. & Regs. (CCH) ¶ 30,688, *order on reh'g*, Order No. 436-C, 34 FERC ¶ 61,404, *order on reh'g*, Order No. 436-D, 34 FERC ¶ 61,405, *order on reh'g*, Order No. 436-E, 34 FERC ¶ 61,403 (1986) *vacated and remanded sub nom*; *Pipeline Serv. Obligations Governing Self-Implementing Transp. Under Part 284 of the Commission's Regulations*, Order No. 636, 59 FERC ¶ 61,030 (1992), *order denying reh'g in part, granting reh'g in part, and clarifying*, Order No. 636-A, 60 FERC ¶ 61,102 (1992), *order denying reh'g and clarifying*, Order No. 636-B, 61 FERC ¶ 61,272 (1992), *order on remand*, Order 636-C, 78 FERC ¶ 61,186 (1997).

[116] *Standards of Conduct for Transmission Providers*, Order No. 717, 125 FERC ¶ 61,604 (2008), *order on reh'g*, Order No. 717-A, 129 FERC ¶ 61,043 (2009), *order on reh'g*, Order No. 717-B, 129 FERC ¶ 61,123, *order on reh'g*, Order No. 717-C, 131 FERC ¶ 61,045 (2010), *order on reh'g*, Order No. 717-D, 135 FERC ¶ 61,017 (2011). Additionally, electricity industry affiliate regulation pursuant to the Federal Power Act includes Federal Power Act sections 203–206. 16 U.S.C. §§ 824b-824e.

[117] Dr. Steve Isser, *Natural Gas Pipeline Certification and Ratemaking* at 23 (Oct. 19, 2016), https://rethinkenergynj.org/wp-content/uploads/2016/10/ISSER_REPORT_CV.pdf (hereinafter Isser Report). However, in that context, "FERC was concerned that a pipeline affiliate might aid the parent corporate entity by refusing to build capacity, and would be particularly sensitive to complaints that pipelines, on which affiliates hold large amounts of transportation capacity, were refusing to undertake construction projects." *Id.* at 23–24 (citing Order Nos. 637-A and 637-B).

that are affiliated with new pipeline developers are at risk of harm from this regulatory gap. As energy expert Dr. Steve Isser noted:

> There has been less concern in recent years with cross-subsidization of regulated entities in the age of deregulated markets, despite the fact that regulated electricity transmission and natural gas pipelines comprise a substantial portion of the capital investment and related charges that contribute to consumer costs in both industries. The Commission has expressed concern about protecting ratepayers in mergers and similar transactions under the [Federal Power Act], and this protection should be extended to natural gas pipelines and gas/electric transactions.
>
> Where pipelines are financed through long-term contracts with LDCs or utilities that are subsidiaries of the parent company building the pipeline, **the efficiency of the pipeline cannot be presumed by a full subscription to its capacity**. **Cross subsidization can be accomplished by risk shifting as well as direct side payments**. An uneconomic project that creates excess capacity can be financed in this manner by guaranteeing its income stream at the expense of alternative transport options. In this case, the Commission would be advised to bring a higher level of scrutiny to these projects including a closer examination of the ROE.[118]

A former state utility commissioner and industry expert further explained that some Commission and state codes of conduct exist that "address vertically integrated monopoly interactions with unregulated affiliates. But, there are no similar separations and codes of conduct between affiliated businesses that are 'horizontally' related."[119] The combination of relying on an affiliate contract as a proxy for economic need, combined with a lack of proper regulation to protect ratepayers, places consumers at heightened risk.

[118] Isser Report at 24 (emphasis added).

[119] David Littell, *When Utility Gas Affiliates Play by Monopoly Rules, Consumers Are Likely to Lose*, REGULATORY ASSISTANCE PROJECT (Apr. 6, 2018), https://www.raponline.org/blog/when-utility-gas-affiliates-play-by-monopoly-rules-consumers-are-likely-to-lose/.

ii. *Increasing Stranded Asset and Stranded Cost Risk*

Sole reliance on affiliate precedent agreements also leads to an increased risk of stranded assets. This risk is significant given the long-lived nature of gas pipelines, coupled with uncertainty regarding future energy demand and climate policy and increased use of cleaner energy resources. Affiliate-backed precedent agreements are fueling pipeline construction at a time when the risk of stranded assets, due to uncertainties around future technology and fuel prices, energy demand, and environmental policies, should urge regulatory caution. Current Commission practice fails to account for this serious economic risk. As Dr. Susan Tierney aptly notes in her comments in the instant docket, "[t]he public has an interest in the risk of overbuilding and in avoiding unnecessary rights-of-way, and the NGA's purposes include the orderly development of gas infrastructure (but not at any cost)."[120] Pipelines "are very long-lived, with economic and environmental consequences for others that extend well beyond the horizon of the investor."[121]

Evidence increasingly shows that the mismatch between the 40-to-50-year lifespan[122] of pipeline projects with the declining prospect of their long-term usefulness cannot be ignored.[123] For example, a Rocky Mountain Institute (RMI) analysis recently demonstrated that the "'rush to gas'" will burden both ratepayers and shareholders with billions of dollars in stranded gas

[120] Tierney Comments at 30.

[121] *Id.* at 29.

[122] *The Interstate Natural Gas Transmission System: Scale, Physical Complexity and Business Model* at 1, INGAA (2010), http://www.ingaa.org/file.aspx?id=10751.

[123] Shipper customers, including the pipeline affiliates contracting with the pipeline developer, typically enter into 20-year gas transportation contracts that incorporate the main provisions of the precedent agreement including the length of the contract. There is no guarantee the transportation contracts will be renewed at the end of their term. Moreover, the pipeline assets that are the subject of the contract might become economically stranded prior to the contract's end, given current trends.

assets.[124] RMI's study revealed that the growing use of clean energy resources threatens to erode gas-fired plant revenue within 10 years.[125] As the cost of new renewable resources continues to plummet, new and even **existing** gas plants may not be able to compete. According to RMI:

> the $112 billion of gas-fired power plants currently proposed or under construction, along with $32 billion of proposed gas pipelines to serve these power plants, are already at risk of becoming stranded assets. This has significant implications for investors in gas projects (both utilities and independent power producers) as well as regulators responsible for approving investment in vertically integrated territories.[126]

A recent study published in *Nature Climate Change* similarly establishes the increasing risk of stranded fossil fuel assets: "Plunging prices for renewable energy and rapidly increasing investment in low-carbon technologies could leave fossil fuel companies with trillions in

[124] Mark Dyson, Alexander Engel, & Jamil Farbes, *The Economics of Clean Energy Portfolios: How Renewable and Distributed Energy Resources are Outcompeting and Can Strand Investment in Natural Gas-Fired Generation* at 5, RMI (May 2018), https://www.rmi.org/wp-content/uploads/2018/05/RMI_Executive_Summary_Economics_of_Clean_Energy_Portfolios.pdf (hereinafter RMI Report); Jeff McMahon, *The 'Rush to Gas' Will Strand Billions As Renewables Get Cheaper, Study Says*, FORBES (May 21, 2018), https://www.forbes.com/sites/jeffmcmahon/2018/05/21/the-rush-to-gas-will-cost-billions-in-stranded-assets-as-renewables-get-cheaper-institute-says/#462687c33a0d; *see also* David Roberts, *Clean energy is catching up to natural gas*, VOX (July 13, 2018), https://www.vox.com/energy-and-environment/2018/7/13/17551878/natural-gas-markets-renewable-energy; Danny Kennedy, *The end of natural gas is near*, GREENBIZ (Jan. 22, 2018), https://www.greenbiz.com/article/end-natural-gas-near (indicators include two of the world's leading gas plant turbine makers, GE and Siemens, beginning to exit the turbine-making business due to falling sales including the rise of competing large-scale energy storage).

[125] RMI Report at 9; *see also* Alan Larsen, *GenOn Energy to Retire Three California Gas Plants*, POWER MAGAZINE (Mar. 15, 2018), http://www.powermag.com/genon-energy-to-retire-three-california-gas-plants/. ("In a move that demonstrates how difficult current market conditions are, even for some gas-fired facilities, GenOn Energy—a subsidiary of NRG Energy—said it will shutter three California gas-fired power plants for economic reasons."); Kyle Field, *NRG Energy Announces 2018 Retirement of Southern California Natural Gas Power Plants*, CLEAN TECHNICA (Mar. 14, 2018), https://cleantechnica.com/2018/03/14/nrg-energy-announces-2018-retirement-of-3-southern-california-natural-gas-power-plants/ (quoting Evan Gillespie of the Sierra Club, who stated that "'[c]losing these plants is more proof that clean energy is driving gas out of California. As clean energy grows, our reliance on gas generation is falling quickly and we urge the California Independent System Operator to continue looking at innovative ways to replace these projects with clean energy solutions.'"); Herman K. Trabish, *As gas plants struggle, California seeks new flexible capacity strategies*," UTILITYDIVE (June 27, 2017), https://www.utilitydive.com/news/as-gas-plants-struggle-california-seeks-new-flexible-capacity-strategies/445760/.

[126] RMI Report at 9.

stranded assets."[127] The Commission has an imperative role, as the "guardian of the public interest"[128] in this context, to help manage this outsized risk.

iii. *Pipeline Overbuild Incentivized*

DOE has found that existing pipelines are underutilized. 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.[129] One of the Policy Statement's key goals is to avoid overbuilding.[130] And yet, the Commission's continued reliance on a single, unreliable indicator of economic need threatens to create even more overbuilding by distorting actual market demand.

As just one example, early reports regarding the Sabal Trail Pipeline—which was in part financed with affiliate agreements—point to unneeded capacity. "Data from [Sabal Trail's] first week of preliminary service ... indicates the project is taking capacity away from existing pipeline systems, rather than supplying additional volumes of gas to its destination market of Florida."[131] Specifically, two pipelines had received up to 750 MMcf/d of gas from the Transco Pipeline before Sabal Trail began operating; after Sabal Trail's start-up, the two pipelines received approximately 500 MMcf/d from Transco. The decrease of about 250 MMcf/d was "a

[127] Fiona Harvey, *'Carbon bubble' could spark global financial crisis, study warns*, THE GUARDIAN (June 4, 2018), https://www.theguardian.com/environment/2018/jun/04/carbon-bubble-could-spark-global-financial-crisis-study-warns; *see also* J.-F. Mercure *et al*., *Macroeconomic impact of stranded fossil fuel assets*, 8 NATURE CLIMATE CHANGE 588 (July 2018).

[128] *Fed. Power Comm'n 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)).

[129] *Natural Gas Infrastructure Implications of Increased Demand from the Electric Power Sector* at 22, DOE (Feb. 2015), https://www.energy.gov/sites/prod/files/2015/02/f19/DOE%20Report%20Natural%20Gas%20Infrastructure%20V_02-02.pdf.

[130] Policy Statement at 2.

[131] Art of the Self Deal at 21 (citing Andrew Bradford, *Sabal Trail Adding Pipeline Capacity But Not Demand*, BTU Analytics (June 20, 2017), https://btuanalytics.com/sabal-trail-pipeline-capacity/). The 515-mile Sabal Trail Pipeline is intended to carry gas from Alabama, through Georgia and into Florida. *See Sabal Trail Is…*, Sabal Trail Transmission, http://sabaltrailtransmission.com/ (last accessed July 17, 2018).

fall off roughly equal to the amount taken on by Sabal Trail. Thus, **as Sabal Trail began service, it led to less utilization of competing pipeline systems, not increased incremental demand for gas**."[132] The analysis also indicates that "[f]lattening power demand in Florida suggests this trend could continue."[133] This situation was predictable and avoidable. A similar overbuild dynamic reportedly is emerging in the Midwest. Two pipelines have testified before the Commission that increasing competition from other pipeline systems, combined with alternative energy sources, is "diminishing future flows of gas through their systems."[134]

Some members of the gas industry recognize the reality of pipeline overbuild. A Range Resources representative stated in 2017 that "we don't think there's going to be enough near-term supply to fill all the capacity" from new pipelines, and "[h]istorically, every play gets overbuilt."[135] According to the CEO of Energy Transfer Partners, the company behind the Rover Pipeline, among others, "[t]he pipeline business will overbuild until the end of time."[136] While one of the utility company investors in the Atlantic Coast Pipeline—another major affiliate-backed pipeline project—maintained during the winter that there is a "real and urgent need" for the project due to "severely limited capacity," a neighboring pipeline system suggested that this

[132] Art of the Self Deal at 21 (emphasis added) (citing Andrew Bradford, *Sabal Trail Adding Pipeline Capacity But Not Demand*, BTU Analytics (June 20, 2017), https://btuanalytics.com/sabal-trail-pipeline-capacity/).

[133] Art of the Self Deal at 21.

[134] Art of the Self Deal at 20 (regarding testimony of Tallgrass Interstate Gas Transmission and Great Lakes Gas Transmission companies).

[135] Jim Magill, *Appalachian gas production cannot continue to ramp up rapidly: exec*, S&P GLOBAL PLATTS (Oct. 23, 2017), https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/102317-appalachian-gas-production-cannot-continue-to-ramp-up-rapidly-exec.

[136] IEEFA Report at 12.

was not the case.[137] Specifically, "a spokesperson for Williams, owner of the Transco pipeline … indicated that the infrastructure is in place right now to meet the current demand."[138]

Financial analysts and other experts also have recognized gas pipeline underutilization. A Goldman Sachs study "points to gas transportation capacity outpacing demand in Appalachia, with new pipelines there being only partially filled."[139] Further, as noted by the Institute for Energy Economics and Financial Analysis, "[t]he pipeline capacity being proposed exceeds the amount of gas likely to be produced from the Marcellus and Utica formations over the lifetime of the pipelines."[140] Barclays also projected that the expected new gas pipeline capacity in 2017, when coupled with a milder winter, could lead to "severe under-utilization of pipeline infrastructure" for 2018.[141] Quite simply, building pipelines that are unnecessary to serve need does nothing to advance the public interest and the Commission's reliance on affiliate precedent agreements is contributing to their development.

---

[137] Robert Zullo, *Does recent cold snap underscore or undercut need for Atlantic Coast Pipeline?*, RICHMOND TIMES-DISPATCH (Jan. 14, 2018), https://www.richmond.com/business/does-recent-cold-snap-underscore-or-undercut-need-for-atlantic/article_49ee68f7-3f38-5b00-8f7d-acc4d5eef41a.html; *see also* Amy Mall, *Natural Gas Industry Admits New Pipelines Aren't Needed*, NRDC (Feb. 5, 2018), https://www.nrdc.org/experts/amy-mall/natural-gas-industry-admits-new-pipelines-arent-needed.

[138] *Id.*

[139] Susan Tierney, Ph.D., *Natural Gas Pipeline Certification: Policy Considerations for a Changing Industry*, at 35–36, ANALYSIS GROUP (Nov. 6, 2017), http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/ag_ferc_natural_gas_pipeline_certification.pdf (hereinafter Analysis Group Report) (citing David Iaconangelo, *Appalachian pipeline capacity to outpace demand – report*, ENERGYWIRE (Sept. 26, 2017), https://www.eenews.net/energywire/2017/09/26/stories/1060061647).

[140] IEEFA Report at 11 (referencing a Moody's Investors Service analysis).

[141] Jodi Shafto, *Analysts trim Henry Hub price outlook amid strong Northeast gas supply*, S&P GLOBAL PLATTS (July 27, 2017), http://www.snl.com/SNL.Services.Application.Common.Service/v1/client?#news/article?id=41423797&KeyProductLinkType=7.

d. Sole Reliance on Affiliate Precedent Agreements Distorts Actual Market Demand, Unduly Disadvantaging Competing Energy Resources and Consumers and Causing Avoidable Harm to the Environment

By incentivizing pipeline overbuild, affiliate-backed pipeline construction can skew market demand signals, to the detriment of markets and the consumers whom those markets are intended to serve. Specifically, by relying on an unreliable metric for need, the Commission may be unintentionally inhibiting the expansion of more efficient energy alternatives, including renewable energy and advanced energy storage. The detrimental impact of the long-term lock-in of these pipeline assets rests on consumers, who will pay for the pipeline through their utility bills; the environment also will undergo needless harm.[142] As noted by N. Jonathan Peress of Environmental Defense Fund, the growing "pipeline capacity bubble" presents an array of harms:

> With the magnitude of new pipeline projects under development in addition to those deployed over the past 10 years, there are signs that a natural gas pipeline capacity bubble is forming. A capacity bubble could impose unnecessary costs on energy customers for expensive yet unneeded pipeline capacity, and ultimately constrain deployment of lower cost energy sources like wind and solar in the future considering the long financial lives and expense of new capacity. Where new pipeline capacity is financed by market participants who choose to risk their capital to capture benefits, the prospects of an overbuild are not particularly troublesome from the economic standpoint of society as a whole. However, **a pipeline capacity build-out induced by policies designed to spread the costs of new infrastructure on captive retail or electric ratepayers will almost surely**

[142] As just one example of the real environmental consequences that can occur, one needs to look no further than to the Rover Pipeline's spills of over 2 million gallons of drilling fluids into the Tuscarawas River. *See, e.g., Rover Gas Pipeline told to halt drilling under Tuscarawas River after Stark County spill*, AKRON BEACON JOURNAL (Jan. 24, 2018), https://www.ohio.com/akron/news/local/rover-gas-pipeline-told-to-halt-drilling-under-tuscarawas-river-after-stark-county-spill; *see also* Lorraine Chow, *Rover Pipeline Spills Another 150,000 Gallons of Drilling Fluid Into Ohio Wetlands*, ECOWATCH (Jan. 17, 2018), https://www.ecowatch.com/rover-pipeline-spill-2526282302.html; Lorraine Chow, *Widely-Opposed Pipeline 'Confirms Worst Fears' After Two Spills in Ohio Wetlands*, ECOWATCH (Apr. 19, 2017), https://www.ecowatch.com/energy-transfer-rover-pipeline-spill-2368385484.html.

become un-economic, undermine market drivers for more efficient solutions and impose unacceptable long term environmental and economic costs.[143]

While non-arm's length, lucrative contractual arrangements between a pipeline developer and its affiliates may be economically rational for the contracting parties, these private transactions are not proxies for economic need. Accordingly, while the Commission can continue to include precedent agreements—even those with affiliates—in its "all relevant factors" approach, it must stop its reliance on these contracts to satisfy need and accurately assess need pursuant to a robust and thorough analysis.

4. *A Regional Perspective is Needed (A9)*

In Question A9, the Commission asks whether it should seek to expand its review to incorporate greater consideration of regional energy demands. While the Commission has not generally taken a regional perspective when evaluating gas pipeline proposals, evaluation of "all relevant factors" necessarily entails the review of pipeline proposals with a regional context in mind. For example, many recent pipeline projects have been proposed within the same region and near existing or other proposed pipelines.[144] The rapid expansion of gas production has led pipeline developers to propose competing projects to satisfy identical purported economic needs.[145] This is likely to lead to unneeded pipelines.

[143] Testimony of N. Jonathan Peress, Director of Air Policy, Environmental Defense Fund, Before the Senate Energy and Natural Resources Committee, *Oil and Gas Pipeline Infrastructure and the Economic, Safety, Environmental, Permitting, Construction, and Maintenance Considerations Associated with that Infrastructure* at 4, (June 14, 2016), https://www.energy.senate.gov/public/index.cfm/files/serve?File_id=51079A26-DD96-4FB5-8486-411C8A7F9024. (second emphasis added).

[144] See Commissioner LaFleur's dissents in the Mountain Valley Pipeline and Atlantic Coast Pipeline orders. *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at 1-5 (2017) (Commissioner LaFleur, dissenting); *Atlantic Coast Pipeline, LLC*, 161 FERC ¶ 61,042, at 1-5 (2017) (Commissioner LaFleur, dissenting).

[145] This kind of "competition" will not yield an economic result. In a functioning market, with appropriate signals, both projects would not get built. The Policy Statement states that "[a]n effective certificate policy should … foster competitive markets," among other goals. Policy Statement at 13.

While the Policy Statement was intended to protect against overbuilding, the Commission typically reviews gas pipeline applications in isolation, creating the risk of wasteful duplication and unnecessary infrastructure that exceeds the region's needs.[146] Considering each pipeline proposal in isolation also prevents the Commission from understanding how similar proposals cumulatively affect climate, natural resources, and consumer prices. An integrated, comprehensive need assessment would take into consideration the energy needs of the region(s) affected by the project. Such an assessment would examine factors such as existing and proposed pipeline capacity, long-term energy demand, and state policies.

A regional review would also assist the Commission in identifying and analyzing cumulative environmental impacts to a particular region. Regional analyses of new gas infrastructure are essential to determine the need for new infrastructure and to assist with cumulative impact analysis review under NEPA, particularly when numerous pipeline projects are proposed within the same region. A pipeline-by-pipeline approval process prevents informed public discussion of landscape-level planning for new gas infrastructure.

5. *Examples of Relevant Factors*

The NGA requires the Commission to be the "guardian of the public interest."[147] In discharging this duty, the Policy Statement outlines a vision of considering all relevant factors to determine whether a proposed project is needed. But over the past 19 years, the Commission has deviated significantly from this goal. In contravention of both the Policy Statement and the

[146] "A Need Analysis that takes place without the benefit of considering regional issues increases the possibility of Section 7(c) decisions that produce dis-orderly development" of gas infrastructure. Tierney Comments at 38.

[147] *Fed. Power Comm'n 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)).

language and history of the NGA, the Commission relies almost entirely on precedent agreements to determine economic need and essentially allows that determination to control the entire public interest review, since it has never denied a project with precedent agreements in place. The Commission can and must do better. Accordingly, we urge the Commission to institute a system whereby the Commission conducts a holistic public interest analysis that considers all relevant factors in tandem, including the purported economic need, as well as the project's environmental and other societal impacts. Consideration of all the relevant factors will ensure that only projects that meet the requirements of the NGA receive a certificate. To help the Commission clarify and operationalize our proposed approach, below are examples of the specific inquiries that the Commission should undertake going forward.[148]

a. State Issues

The Commission should require that pipeline applicants submit information on several issues regarding state regulation. On the one hand, the Commission asserts that state regulator authority protects utility ratepayers from potentially imprudent pipeline costs.[149] Yet, at the same time, the Commission fails to identify or examine actual state authority in specific cases, state energy policies,[150] or the state regulator's position on a pipeline project, all of which would help inform the need for a new pipeline in the first instance. State regulator authority regarding utility

[148] Further examples and discussion of relevant factors the Commission should consider can be found in the Tierney Comments in this docket. Tierney Comments at 25–28, 35–39.

[149] NOI at P 53.

[150] As Dr. Tierney notes, "states may have a strong interest in whether the Commission does or does not approve facility proposals, due to those states' policies, but the Policy Statement's definition of Relevant Interests does not include states' interests." Tierney Comments at 31.

purchases of pipeline capacity, through affiliate precedent agreements and other contracts, is not uniform.[151]

The Commission could obtain information regarding state regulation through Commission information requests and/or applicant Resource Reports. Specific questions and matters to address should include, but are not limited to: (1) the state regulator's position on pipeline certificate application and precedent agreements;[152] (2) the level of state review authority regarding contracts and costs related to proposed pipelines;[153] (3) any ratepayer hold-harmless conditions or other ratepayer protection agreements between the state regulator and the utility;[154] and (4) state policies regarding energy resources, including state energy plans or policies addressing climate goals, renewable portfolio standards, energy efficiency, demand

[151] For instance, the state of Missouri does not subject affiliate precedent agreements to prior approval. *See Spire STL Pipeline LLC*, Motion to Lodge of Environmental Defense Fund at 7 (Jan. 9, 2018), Docket No. CP17-40-000. Virginia has an affiliate statute, but declined to review the affiliate contractual relationship involving the proposed Atlantic Coast Pipeline, a decision which was challenged in court. News Release, Sierra Club, *Virginia Supreme Court Hears Arguments Over Sierra Club's Affiliates Act Challenge to Atlantic Coast Pipeline Deal* (June 6, 2018), https://www.sierraclub.org/press-releases/2018/06/virginia-supreme-court-hears-arguments-over-sierra-club-s-affiliates-act.

[152] As a matter of federal-state comity, the position of state regulators should be of interest to the Commission and help inform Commission decision-making.

[153] Some states have restrictions on how often they can review costs or order a rate case. Moreover, state after-the-fact rate review can be insufficient to ensure ratepayer protection since any state prudence review regarding utility decisions to enter into pipeline capacity contracts typically comes after the pipeline is built and in service, and economic harm has already occurred as well as environment damage from pipeline construction. Also, in some instances, it might be damaging to the utility and its customers if state regulators disallow passthrough of significant costs if utility operations might suffer as a result. Further, whether a state regulator has reviewed or approved an affiliate agreement, or whether the state has authority to do so, does not absolve the Commission from its independent NGA duty to protect consumers. *Fed. Power Comm'n v. Hope Gas Co.*, 320 U.S. 591, 610 (1944); *Cal. Gas Producers Ass'n v. Fed. Power Comm'n*, 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 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.").

[154] Such conditions are often employed in merger and rate cases before the Commission, which are given weight in Commission decision-making.

response, energy storage, gas procurement, moratorium or phase-out policies regarding gas plant siting,[155] and utility integrated resource plans.

b. Energy Demand

While pipeline developers claim that there will be significantly increased energy demand to justify continued pipeline construction,[156] these are not the only projections available and competing projections suggest a decrease in demand.[157] To ensure a robust review, the Commission should seek to incorporate into the record a wide range of sources of demand projections specific to the areas where a proposed pipeline is supposed to serve.

To its credit, the Commission already has recognized the importance of getting various views regarding energy demand projections. For example, in 1999, in the lead-up to the adoption of the Policy Statement, the Commission held a public conference on anticipated demand for gas in the Northeastern United States.[158] However, recent comments by Commission representatives

[155] *See, e.g.*, *Some states block plans for new power plants*, ENERGYWIRE (Mar. 20, 2018), https://www.eenews.net/energywire/2018/03/20/stories/1060076757 ("[R]egulators, environmentalists and citizens groups in states like Arizona, Massachusetts and Michigan have blocked the construction of new gas-fired power plants."); Robert Walton, *Arizona regulators move to place gas plant moratorium on utilities,* UTILITYDIVE (Mar. 15, 2018), https://www.utilitydive.com/news/arizona-regulators-move-to-place-gas-plant-moratorium-on-utilities/519176/.

[156] These projections often are based on international demand for liquefied natural gas. *See, e.g.*, Tsvetana Paraskova, *Huge Chinese Demand Fuels The Next U.S. Gas Boom*, OILPRICE (Mar. 11, 2018), https://oilprice.com/Energy/Natural-Gas/Huge-Chinese-Demand-Fuels-The-Next-US-Gas-Boom.html; Tom DiChristopher, *Shell warns of liquefied natural gas shortage as LNG demand blows past expectations*, CNBC (Feb. 26, 2018), https://www.cnbc.com/2018/02/26/shell-warns-of-lng-shortage-as-demand-for-liquefied-natural-gas-booms.html.

[157] RMI Report at 14; *see also* Alex Engel & Mark Dyson, *The Billion-Dollar Costs of Forecasting Electricity Demand*, RMI (Oct. 23, 2017), https://rmi.org/billion-dollar-costs-forecasting-electricity-demand/.

[158] *Anticipated Demand for Natural Gas in the Northeastern United States*, Notice of Public Conference (Apr. 14, 1999), Docket No. PL99-2-000. Today, nearly 20 years later, no such inquiry has been instituted, despite substantial shifts in the industry since 1999, and increasing indications that existing and planned pipelines are at risk of being stranded assets. RMI Report at 5, RMI (May 2018); Jeff McMahon, *The 'Rush to Gas' Will Strand Billions As Renewables Get Cheaper, Study Says*, FORBES (May 21, 2018), https://www.forbes.com/sites/jeffmcmahon/2018/05/21/the-rush-to-gas-will-cost-billions-in-stranded-assets-as-renewables-get-cheaper-institute-says/#462687c33a0d; *see also* David Roberts, *Clean energy is catching up to natural gas*, VOX (July 13, 2018), https://www.vox.com/energy-and-environment/2018/7/13/17551878/natural-gas-markets-renewable-energy; Danny Kennedy, *The end of natural gas is near*, GREENBIZ (Jan. 22, 2018),

have raised concerns about whether the Commission respects the need conclusions of sister agencies that also participate in pipeline reviews.[159] Such statements can operate to further undermine public confidence in the Commission's decision-making process, which has already garnered serious criticism.[160]

The Commission should require submission of independent, analysis-based comprehensive studies and other information regarding energy demand related to the proposed pipeline. Specific information to require includes, but is not limited to: (1) projections of short-term and long-term gas and electric energy demand for the region in which the pipeline is proposed, including the states in which the pipeline would run;[161] (2) consideration of the existing Policy Statement factor of comparing projected demand with the amount of capacity

https://www.greenbiz.com/article/end-natural-gas-near (indicators include two of world's leading gas plant turbine makers, GE and Siemens, beginning to exit the turbine-making business due to falling sales including the rise of competing large-scale energy storage).

[159] For example, in a July 8, 2018 interview with *Breitbart News Sunday*, Commission Chief of Staff Anthony Pugliese politicized the Commission and its role, undermined state participation in pipeline reviews, and appeared to support a view that the Commission's job is to approve—not review—gas pipelines. For example, he stated, "You still have some parts of the country that are controlled by the Democratic Party and others that are determined to ensure that no infrastructure goes through their states and are determined to say no just because the Trump administration is supporting it…. They are putting politics above the best interests of not only of consumers in their states but also national security ... [and] for purely political reasons, some governors and other state and local entities are blocking our ability to put in that infrastructure." Interview with Anthony Pugliese, *Breitbart News Sunday* (July 8, 2018), https://soundcloud.com/breitbart/breitbart-news-sunday-anthony-pugliese-july-8-2018; *see also* Sean Moran, *Exclusive – Senior Energy Official: Local Dem-Controlled Gov'ts Block Infrastructure Projects to Resist Trump*, BREITBART (July 11, 2018), https://www.breitbart.com/big-government/2018/07/11/exclusive-senior-energy-official-local-dem-controlled-govts-block-infrastructure-projects-to-resist-trump/; Kelsey Tamborrino, *A new day at EPA?*, POLITICO (July 9, 2018), https://www.politico.com/newsletters/morning-energy/2018/07/09/a-new-day-at-epa-273153 (noting that Breitbart posted the interview as "MAGA Energy" on Twitter and that Pugliese also "expound[ed] on the resilience virtues of coal and nuclear power, the Transportation Department's progress on cutting regulations, and how much the Trump administration is doing to improve American lives in places like his home state of Pennsylvania.").

[160] *See generally* Audit Report, *The Federal Energy Regulatory Commission's Natural Gas Certification Process*, DOE OFFICE OF INSPECTOR GENERAL (May 24, 2018), https://www.energy.gov/sites/prod/files/2018/05/f52/DOE-OIG-18-33.pdf.

[161] The Policy Statement already lists demand projections as a relevant factor to consider. Policy Statement at 23. More specificity regarding the kind of projections and a more comprehensive scope is needed. Electricity demand projections are also needed given the interrelationship between the gas and electricity markets and increased use of gas to fuel electricity generating plants.

already serving the market;[162] and (3) energy industry resource trends impacting the relevant region.[163]

With respect to projections, the Commission must ensure that the pipeline applicant is not the only source of such studies. For example, it could require Commission staff to submit independent studies, as is often done in merger and rate hearing cases before the Commission. The Commission should also invite studies from any regional transmission organizations or other planning entities in the region at issue. While some have raised concerns about the Commission's ability to handle a "battle of the experts," this concern is misplaced for at least two reasons. First, by considering only the most optimistic of projections provided by the pipeline applicant, the Commission already is choosing to consider one projection over another—it just is not taking the step of comparing the pipeline applicant's offered projection against other sources. Second, the Commission, as a quasi-judicial administrative body, is fully capable of weighing the evidence before it. **To be clear, that is the Commission's job under the NGA**. The problem under the current system is that it is not weighing the evidence, and simply taking a pipeline applicant at its word. If the demand really is as strong as the applicant asserts, it should have no issue in showing that its projections are the most reliable estimates available.

---

[162] Policy Statement at 23.

[163] *E.g.*, Fiona Harvey, *'Carbon bubble' could spark global financial crisis, study warns*, THE GUARDIAN (June 4, 2018), https://www.theguardian.com/environment/2018/jun/04/carbon-bubble-could-spark-global-financial-crisis-study-warns; Peter Maloney, *Nearly 1/3 of planned gas peakers at risk from energy storage, GTM finds*, UTILITYDIVE (Mar. 20, 2018), https://www.utilitydive.com/news/nearly-13-of-planned-gas-peakers-at-risk-from-energy-storage-gtm-finds/519577/; Robert Walton, *EIA: Gas generation dropped 7.7% in 2017 while coal declined 2.5%*, UTILITYDIVE (Mar. 20, 2018), https://www.utilitydive.com/news/eia-gas-generation-dropped-77-in-2017-while-coal-declined-25/519568/; Michael Lynch, *The Myth of Natural Gas As A Bridging Fuel*, Forbes (Aug. 14, 2017), https://www.forbes.com/sites/michaellynch/2017/08/14/the-myth-of-natural-gas-as-a-bridging-fuel/#3a0bebb6e447.

c. Potential Cost Savings and Potential Cost Increases to Customers

The Policy Statement outlines potential cost savings to customers as a relevant factor to be considered. Potential cost increases to the customer must also be considered to help ensure a balanced inquiry. Related issues and questions include, but are not limited to: (1) potential stranded cost risk, particularly given any relevant energy demand projections and resource trends; (2) methods for pipeline developers to internalize the risk of pipelines that become stranded assets;[164] and (3) state policies or positions regarding potential stranded costs.

d. Other Existing or Proposed Pipelines

The Commission must also consider any known existing or proposed pipelines that might be in close geographic proximity to the proposed pipeline, and other accessible pipelines in the region, to help prevent duplicative facilities and waste.[165] Required information should include, but is not limited to: (1) any impact on other existing pipelines[166] and (2) available capacity of existing and proposed pipelines in the region.

e. Environmental Impacts

Anticipated environmental impacts from pipeline construction and operation on the affected region are also important considerations that must inform the Commission's inquiry regarding the public interest. As noted above, these considerations have been part of the public convenience and necessity analysis since its inception and are even included in the balancing framework proposed by the Policy Statement. But, in practice, the Commission does not fully

[164] Analysis Group Report at 40.

[165] See Commissioner LaFleur's dissents in the Mountain Valley Pipeline and Atlantic Coast Pipeline orders. *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at 1-5 (2017) (Commissioner LaFleur, dissenting); *Atlantic Coast Pipeline, LLC*, 161 FERC ¶ 61,042, at 1-5 (2017) (Commissioner LaFleur, dissenting).

[166] Policy Statement at 19–22.

incorporate environmental impacts into its NGA analysis; in particular, the Commission does not fully discuss the conclusions of its NEPA analysis in its NGA review. The data obtained through an exhaustive NEPA review necessarily influences whether a project is in the public interest and should be awarded a certificate. A regional review approach would further assist the Commission in evaluating the regional impacts of new gas infrastructure.

f. Effect on Competition

Potential competitors and other interested stakeholders should be encouraged to offer evidence, including analyses, regarding any anticompetitive effects stemming from the pipeline project. For example, competing pipelines and competing clean energy suppliers could submit studies or examples regarding their costs, availability, and competitiveness, and any relevant barriers to their entry in the market.

g. Precedent Agreements

As noted above, we agree that precedent agreements are relevant; the problem is that they have been treated as dispositive. As such, the Commission may continue to consider the existence of these contracts as one of many relevant factors. However, for the reasons discussed above, affiliate precedent agreements, where the pipeline developer is essentially both the buyer and seller of pipeline capacity, should be weighed differently. Specifically, affiliate precedent agreements should be afforded little weight, because they are tainted by their non-arms-length nature. Other factors can provide more objective indicators of need, and precedent agreements should never be able to universally supplant the NGA public interest standard.

h. Community and Landowner Impacts

The Commission must consider the impacts of pipeline certificate authority on communities and landowners. This is more than a simple tally of the affected acreage as is done currently, but includes a holistic understanding of the intersection between eminent domain and the Commission's certification authority. This is examined in detail in Section III.B., *infra*.

B. The Exercise of Eminent Domain and Landowner Interests (B1-B5)[167]

In NOI Questions B1-B5, the Commission probes several issues related to the use of eminent domain for proposed projects. We answer these questions in turn.

Both Section 7(h) of the NGA and the Fifth Amendment of the U.S. Constitution require the Commission to carefully administer its delegated power of eminent domain in Section 7 certificate proceedings, and require the Commission to authorize only projects for which it has made a final determination of public use.[168] As set out in Section III.A, *supra*, the Commission should vigorously inquire into "all relevant factors" as to whether there is need for a proposed project. This need inquiry is essential to the ultimate inquiry, on behalf of the public, into the proposed project's harms versus benefits. An affirmative determination by the Commission that the benefits outweigh the harms—in other words, that the project is in the public interest—conveys to the applicant the right of eminent domain.

[167] Section III.B regarding eminent domain and landowner interests is in part derived from contributions by the New Jersey Conservation Foundation (NJCF); NJCF is also submitting comments in this NOI docket.

[168] The Commission acknowledges that its issuance of a certificate is the legal predicate for delegating eminent domain authority to a private pipeline applicant, yet currently, the Commission does not ensure the applicant's exercise of that authority comports with either Section 7(h) or the public use clause of the Fifth Amendment. *See* NOI at P 55 ("Although Commission authorization of a project through the issuance of a certificate of public convenience and necessity under the NGA conveys the right of eminent domain, the Commission itself does not grant the use of eminent domain across specific properties.") *see also Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528, 543 (2005) ("If a government action is found to be impermissible—for instance because it fails to meet the 'public use' requirement or is so arbitrary as to violate due process—that is the end of the inquiry. **No amount of compensation can authorize such action.**" (emphasis added)).

Absent an affirmative public interest determination, the Commission cannot delegate eminent domain authority to private corporations under the plain language of Section 7(h) of the NGA and the Fifth Amendment.[169] Accordingly, our recommendations aim to ensure that any future delegations of eminent domain authority are narrowly circumscribed by the Commission to only those proposed projects with an affirmative public interest determination. Moreover, such delegations must be confined to the scope of the affirmative determination by the Commission.

1. *The Commission's Consideration of Eminent Domain (B1)*

In 1938, to protect the public from a looming crisis in which homes might not have enough heat for the winter, Congress provided for federal regulation of the interstate transportation of gas in lieu of exclusive control by state governments.[170] The Federal Power Commission (now FERC) was granted the power to award certificates of public convenience and necessity to those projects that it found to be required by the public interest and that would protect the public from abuses that arise from private control of the gas supply.[171] Yet, by the end of World War II, there was still no integrated and reliable network of gas pipelines, with much of the gas stopping short of city limits. Thus, in 1947, Congress amended the NGA to authorize the exercise of delegated federal eminent domain by certificate holders (via Section 7(h)).[172] With the eminent domain authority these certificates facilitated, companies could more easily build new gas pipelines to heat homes and create a national system of gas transportation.

[169] *See* 15 U.S.C. § 717f(h) (outlining the right of eminent domain for the construction of pipelines); U.S. CONST. amend. V ("[N]or shall private property be taken for public use, without just compensation.").

[170] 15 U.S.C. §§ 717-717z.

[171] 15 U.S.C. § 717f(c).

[172] Pub. L. No. 80-245, 61 Stat. 459.

In 1970, due to a realization that the nation's waters, air, and coastal zones were increasingly suffering from pollution and development stresses, Congress passed NEPA. The Commission is charged with administering NEPA as applied to interstate gas projects.[173] The Commission has consistently acknowledged and conveyed to applicants the important role of all federally mandated authorizations in its certification process, including the fact that such authorizations circumscribe the Commission's certification authority.[174]

a. The Intersection between the Commission's Need Determination and Eminent Domain

Section 7(h), which is predicated on satisfying Section 7(c)'s public convenience and necessity standard, contains Congress' 1947 grant of eminent domain authority. Any invocation of Section 7(h) authority must also comport with the Fifth Amendment of the U.S. Constitution, the underlying source of this delegated federal eminent domain authority. In recent orders, the Commission has indicated that it uses its public convenience and necessity analysis as a proxy to satisfy the Fifth Amendment's public use requirement.[175]

[173] *See* 15 U.S.C. § 717n(b)(1) (providing that the Commission shall act as the lead agency for purposes of complying with NEPA with respect to an application for a certificate of public convenience and necessity under Section 7).

[174] The Commission has articulated this message across all facets of its proceedings, from cautioning applicants to seek those federal authorizations expeditiously, even during pre-filing, to explicitly making its own authorizations contingent on securing those approvals, and upholding states' authority to deny such certifications. *See, e.g.*, *Constitution Pipeline Co., LLC*, 149 FERC ¶ 61,199, at P 51 (2014) (certificate order is conditioned on Constitution obtaining all "applicable authorizations required under federal law (or evidence of waiver thereof)"); Regulations Implementing the Energy Policy Act of 2005: Coordinating the Processing of Federal Authorizations for Applications Under Sections 3 and 7 of the Natural Gas Act and Maintaining a Complete Consolidated Record, 71 Fed. Reg. 62,912, 62,913 & n.9 (Oct. 19, 2006) (encouraging applicants to submit robust applications for additional federal authorizations early in the process, even during pre-filing, because "completion of the Commission's assessment of an application often rests on other agencies reaching favorable determinations on separate authorization requests."); *see also Constitution Pipeline Co., LLC*, 162 FERC ¶ 61,014 (2018) (upholding NYSDEC's denial of Constitution's application for a Section 401 Clean Water Act certification), *reh'g granted*, Order Granting Rehearing for Further Consideration (Mar. 14, 2018), Docket No. CP18-5-001, *reh'g denied*, Order Denying Rehearing (July 19, 2018), CP18-5-001.

[175] *See Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at P 61 (2017) ("The Commission, having determined that the MVP Project is in the public convenience and necessity, need not make a separate finding that

Under the Policy Statement, when a proposed project requires even a modest exercise of eminent domain, the applicant is supposed to produce substantial evidence[176] of significant public benefits.[177] Yet, in practice, the Commission has not required any greater evidentiary showing for projects requiring extensive use of condemnation relative to those requiring little or none. Rather, as discussed above, the Commission relies on a single data point—the existence of a precedent agreement, often between affiliates—to authorize virtually all projects, regardless of the extent to which they involve condemnation, be it for public or private lands.

For example, the Commission's order granting a certificate for the Atlantic Coast Pipeline recognized that there was ample existing infrastructure and that the proposed project rested on nearly 100 percent affiliate-generated demand.[178] Precisely because "all but one of the shippers"[179] were pipeline affiliates, intervenors urged the Commission to follow the "all relevant factors" approach to its need inquiry. Nevertheless, the Commission found that the precedent agreements were "the best evidence that additional gas [would] be needed."[180]

On the same day, the Commission granted a certificate for the Mountain Valley Pipeline.[181] The two projects had similar proposed end-uses.[182] There, too, intervenors submitted

---

the project serves a 'public use' to allow the certificate holder to exercise eminent domain. In short, the Commission's public convenience and necessity finding is equivalent to a 'public use' determination.").

[176] 15 U.S.C. § 717r(b); 5 U.S.C. § 706(2)(E); *Mobil Oil Corp. v. Fed. Power Comm'n*, 483 F.2d 1238, 1257–58 (D.C. Cir. 1973) (confirming that the requirement of substantial evidence in administrative decision-making applies to the Commission's decisions under the NGA).

[177] Policy Statement at 27.

[178] *Atlantic Coast Pipeline, LLC*, 161 FERC ¶ 61,042, at P 44 (2017) ("[A]ll but one of the shippers on the ACP Project are affiliated with the project's developers[.]").

[179] *Id.*

[180] *Id.* at P 55.

[181] *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043 (2017).

[182] See Commissioner LaFleur's dissents in the Mountain Valley Pipeline and Atlantic Coast Pipeline orders. *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at 1-5 (Commissioner LaFleur, dissenting); *Atlantic Coast Pipeline, LLC*, 161 FERC ¶ 61,042, at 1-5 (Commissioner LaFleur, dissenting).

data showing that regional pipeline infrastructure was overbuilt and urged the Commission to measure need against all relevant factors, not limited to the applicant's precedent agreements with affiliates. Yet, the Commission held that precedent agreements were the best and only required evidence of need.[183] The Commission then assumed that this "need" satisfied its obligation to determine public interest and public use.[184]

Having determined on this basis that a pipeline is required by the public convenience and necessity, the Commission disclaims any power to limit the eminent domain authority of the certificate holder.[185] Pipeline companies have sought to seize up to 65 percent of the route in some states[186] and even those high percentages do not accurately reflect landowner impacts for the reasons set out below, such as the high cost of legal representation and unfair bargaining power, which leads people to believe they have no choice but to settle.[187]

---

[183] *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at P 41("We find that the contracts entered into the shippers are the best evidence that additional gas will be needed in the markets that the MVP and Equitrans Expansion Projects are intended to serve."). *Compare Rover Pipeline LLC*, 158 FERC ¶ 61,109, at P 44 n.35 (2017) (stating that "[i]t is current Commission policy to not look beyond precedent or service agreements" and noting that there is "nothing in the policy statement or in any precedent construing it to suggest that it requires, rather than permits, the Commission to assess a project's benefits by looking beyond the market need reflected by the applicant's existing contracts with shippers.") *with* Policy Statement at 23 ("Rather than relying only on one test for need, the Commission **will** consider all relevant factors reflecting on the need for the project. These might include, **but would not be limited to,** precedent agreements, demand projections, potential cost savings to consumers, or a comparison of projected demand with the amount of capacity currently serving the market." (emphasis added)).

[184] *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at P 61.

[185] *E.g.*, *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at P 59.

[186] This is the case for the PennEast Pipeline. *See, e.g.*, Editorial, Jeff Tittel, *TITTEL: 3 Years After Start of PennEast; Many Victories But Future Battles Ahead*, ASHBURY PARK PRESS (Aug. 14, 2017), https://www.app.com/story/opinion/columnists/2017/08/14/asszony/555295001/.

[187] Enclosed are the affidavits of several affected community members who attest to the wide-ranging harms from such unfair practices, not the least of which is acute emotional distress. These affidavits show an insidious problem that is ignored in the Commission's current policy and practices, but that can and should be measured and managed. *See, e.g.*, Affidavit of Joanna Salidis, at P 11 ("My health was impacted by the mental stress of the pipeline going through my property…. During the process I was so stressed and concerned that I could not eat and ended up losing significant weight."). The Commission also must make sure its correspondence with community members does not compound this issue, by making members feel as though the pipeline project is a done deal. *See, e.g.*, Affidavit of Joyce Burton, at P 10 (with respect to the Atlantic Coast Pipeline, the "first contact I received from FERC was in 2014. It was a glossy brochure about the proposed pipeline that outlines how the gas company is going to come to your home to discuss the route through your land and implied that if you did not negotiate an easement

The Commission's current practice of assessing need based only on precedent agreements fails to comport with the Fifth Amendment's public use clause.

b. The Risks of Conditional Certificates that Grant Eminent Domain Authority

Compounding the harm from the Commission's current practice of relying on only one data point to determine both need and benefit, the Commission's practice of issuing certificates that precede Clean Water Act (CWA), Clean Air Act (CWA), Coastal Zone Management Act (CZMA), and National Historic Preservation Act (NHPA) authorizations leads to a factual vacuum on the other side of the public interest scale: assessing harm from proposed projects.[188] Thus, the Commission must also reform its handling of projects for which the applicant has failed to obtain outstanding required authorizations, specifically by either eliminating or limiting conditional certificates for projects that will use eminent domain.

The NGA states that the Commission "shall have the power to attach to the issuance of the certificate ... such reasonable terms and conditions as the public convenience and necessity may require."[189] The Commission has used this authority to conditionally approve pipelines that

with them, eminent domain would be invoked. Though this was literally years before a Certificate of Public Convenience and Necessity had been granted, it presented the project as if it was already a 'done deal.'"); Affidavit of Joseph Madison, at P 11 ("I wish that FERC took the time to truly listen to us instead of supporting the proposed pipeline by default and only offering responses that defend the pipeline process.") If the Commission ensured that its correspondence communicated that an application is just that—an application subject to acceptance or denial—it may limit the pipeline applicant's ability to use "strong-arm" tactics. *See, e.g.*, Affidavit of Susan Pantalone, at P 12, whose property is along the Atlantic Sunrise Pipeline path ("When my mother died…Transco…somehow found out that she had passed and that the property had moved into my hands, so then they started coming to my house. When I met them at the door I would just tell them no, I did not even want to engage with them. Little did I know, all that time they were coming to my house they were signing agreements with other people and figuring out the route. Finally one day they said to me that if I do not sign they are just going to take it by eminent domain, that the route was already set.").

[188] The Commission also frequently concludes its EIS process without additional substantive consultations such as required by NHPA and Endangered Species Act (ESA).

[189] 15 U.S.C. § 717f.

have not been granted permits under the CWA, CAA, CZMA, and NHPA. These conditional certificates do not allow the applicant to begin construction until all required authorizations are received—however, they have been used by applicants to irreparably harm the environment prior to full project approval through so-called "pre-construction," which the Commission has interpreted to include the felling of trees along portions of the project,[190] or to seize land for the pipeline through eminent domain. These conditional certificates were never contemplated by the authors of the NGA, because the laws requiring these additional federal authorizations were passed decades after the power to attach conditions to certificates was granted. That power anticipated conditions **to** fully-functioning, valid certificates; not **conditional** certificates that do not become valid **until** other required authorizations have been granted.[191] If the Commission maintains (1) its practice of issuing certificates prior to applicants' receipt of all required authorizations and (2) its view that even conditional certificates come with unrestricted condemnation power under Section 7(h) of the NGA, then the Commission ought not to issue conditional certificates to any applicant that proposes to exercise eminent domain.[192]

---

[190] While the Commission will not authorize such construction or pre-construction activities in states where CWA Section 401 certification has not been received, the Commission has previously approved such activities where just one state along a route has issued its 401 CWA certification. This practice subjects landowners to property seizures that are per se unnecessary for the construction of a pipeline, in contravention of Section 7(h). Following the recommendations set out herein with respect to access should allow the Commission to uniformly prevent such a result going forward. *See, e.g.*, *Constitution Pipeline Co., LLC*, Partial Notice to Proceed with Tree Felling and Variance Requests (Jan. 8, 2016), Docket No. CP13-399-000 (permitting tree felling in Pennsylvania when federal authorizations remained outstanding); *see also* Jon Hurdle, *A company cut trees for a pipeline that hasn't been approved. The landowners just filed for compensation*, STATEIMPACT (July 12, 2018), https://stateimpact.npr.org/pennsylvania/2018/07/12/a-company-cut-trees-for-a-pipeline-that-hasnt-been-approved-the-landowners-just-filed-for-compensation/ (noting that a Pennsylvania family that lost 588 trees for the Constitution Pipeline has filed a motion to dissolve the injunction granting Constitution access to their property).

[191] *See Panhandle E. Pipe Line Co. v. Fed. Energy Regulatory Comm'n*, 613 F.2d 1120, 1131-32 (D.C. Cir. 1979). The language regarding attaching reasonable conditions is from a 1942 amendment to the NGA and as such, could not have contemplated that the finding itself of public interest and necessity could be conditioned on the critical public interest factors provided by the CWA, CAA, and CZMA. Act of Feb. 7, 1942, Pub. L. No. 77-444, 56 Stat. 83.

[192] As more fully discussed below, in the alternative, the Commission should limit the delegation of eminent domain authority until the ancillary federal authorizations have been granted. Given the Commission's broad

Condemnation prior to full authorization violates both the NGA's requirements for the issuance of a certificate with attendant condemnation power and the Fifth Amendment's public use requirement. Before full federal authorization, it is impossible to know whether either of those requirements are satisfied. We address each in turn below.

i. *The NGA "Public Convenience and Necessity" Requirement*

To issue a certificate, the Commission must find that the applicant's project is "required by the present or future public convenience and necessity."[193] The environmental analyses performed under the CWA, CAA, and CZMA, for example, provide critical environmental information without which a final public interest analysis cannot be performed. By denying authorization under one of those laws, an agency provides the Commission with information indicating that the applicant's project is counter to the public interest. Where the Commission has issued conditional certificates to applicants who propose to use eminent domain, such applicants can prematurely use those conditional authorizations to condemn—and permanently alter via tree felling—lands for projects that may ultimately be found not to be in the public interest.

By making the public convenience and necessity finding contingent upon the receipt of other required authorizations, the Commission acknowledges that it cannot truly finalize its public interest finding without the information revealed in pending environmental analyses. As such, the Commission necessarily limits the actions that be can be approved via such certificates "because completion of the Commission's assessment of an application often rests on other

interpretation of its power to condition certificates, it would be well within this broad interpretation to circumscribe the applicants' eminent domain authority to the right of entry necessary to pursue other federal authorizations. In fact, using a conditional grant of eminent domain would be directly analogous to the Commission's current use of conditional certificates issued prior to granting the full Section 7 authorization to construct the pipeline.

[193] 15 U.S.C. § 717f(e).

agencies reaching favorable determinations on separate authorization requests."[194] The Commission's regulations recognize the need for these authorizations early in the process—as part of a certificate application, or even pre-filing if the applicant so chooses—not after lands have been condemned.[195] The Commission should ensure that certificates that it has explicitly limited to grant the holder very little actual authority are not then used to take private citizens' land for a project that the Commission has not finally determined to be required by the public convenience and necessity. The Commission does not authorize applicants to begin construction under conditional certificates for these very reasons; if these certificates are not sufficient for an applicant to begin construction, they also should not be used to irreparably harm the environment and/or to take private citizens' land.[196]

Moreover, the Commission's own interpretations and findings support the conclusion that an applicant should not be granted condemnation power before obtaining all federally mandated authorizations. The NGA gives the Commission the power to "attach to [the certificate] ... such reasonable terms and conditions as the public convenience and necessity may require."[197] The

---

[194] Regulations Implementing the Energy Policy Act of 2005: Coordinating the Processing of Federal Authorizations for Applications Under Sections 3 and 7 of the Natural Gas Act and Maintaining a Complete Consolidated Record, 71 Fed. Reg. 62,912, 62,913 & n.9 (Oct. 19, 2006).

[195] *See* 18 C.F.R. § 157.14(a)(13) (Regulation requiring application to include a statement identifying each federal authorization the project proposal requires, and information as to the date of application for those authorizations, or reasons why any request would not already have been submitted); 71 Fed. Reg. 62,912, 62,913 & n.9 (noting that applicants using the pre-filing process can "compress the time needed to obtain Commission authorization.... In large part, this is because completion of the Commission's assessment of an application often rests on other agencies reaching favorable determination on separate authorization requests.").

[196] See *Sierra Club v. Fed. Energy Regulatory Comm'n*, 867 F.3d 1357, 1373 (D.C. Cir. 2017) ("Congress broadly instructed the agency to consider 'the public convenience and necessity' when evaluating applications to construct and operate interstate pipelines" and that, in doing so, the Commission "will balance 'the public benefits against the adverse effects of the project,' including adverse environmental effects."); *see also Pub. Utils. Comm'n of Cal. v. Fed. Energy Regulatory Comm'n*, 900 F.2d 269, 281 (D.C. Cir. 1990) (The public interest standard under the NGA includes factors such as the environment and conservation, particularly as decisions concerning the construction, operation, and transportation of natural gas in interstate commerce "necessarily and typically have dramatic natural resource impacts.").

[197] 15 U.S.C. § 717f(e).

Commission has listed conditions permitted by this clause in its regulations.[198] These conditions pertain to timing, transferability, notice, and technical limits on operation pressure. These conditions are all technical in nature, without bearing on the essential public interest inquiry required by the NGA. By promulgating these regulations, the Commission has shown that it interprets the NGA as allowing it to attach only such technical conditions to any certificate it issues. Granting certificates that are conditioned on the applicant later providing supporting technical information that is critical to the determination of public convenience and necessity (such as environmental analyses performed under the CWA, CAA, and CZMA) does not meet the Commission's promulgated regulatory implementation of the NGA.

ii. *Restricting Condemnation to those Lands Necessary to Construct*

The NGA itself further confirms that only certificates for fully authorized projects should trigger delegation of condemnation authority, stating that a certificate holder can use the power of eminent domain to acquire "the **necessary** right-of-way to **construct**, operate, and maintain a pipe line … and the **necessary** land" if it cannot acquire them by contract.[199] In fact, those were the only types of certificates contemplated when the condemnation authority was congressionally delegated. The restriction to "necessary" lands is reaffirmed by caselaw.[200] Pursuant to the CWA, CAA, and CZMA permitting processes, the applicant may be obliged, for example, to alter the

[198] 18 C.F.R. § 157.20.

[199] 15 U.S.C. § 717f(h) (emphasis added).

[200] *Transwestern Pipeline Co. v. 17.19 Acres of Prop. Located in Maricopa Cty.*, 550 F.3d 770, 776 (9th Cir. 2008) (A party using eminent domain under the NGA must show "that the land to be taken is necessary to the project."); *Mountain Valley Pipeline, LLC v. An Easement to Construct, Operate, & Maintain a 42-Inch Gas Transmission Line Across Props. in the Ctys. of Nicholas, Greenbrier, Monroe & Summers*, No. 2:17-cv-04214, 2018 WL 1004745, at *1 (S.D. W. Va. Feb. 21, 2018) (A "certificate holder has the power of eminent domain over properties that are necessary to complete an approved project[.]"); *Nexus Gas Transmission, LLC v. City of Green*, No. 5:17-CV-2062, 2017 WL 6623511, at *2 (N.D. Ohio Dec. 28, 2017); *GTN, LLC v. 15.83 Acres of Permanent Easement*, 126 F. Supp. 3d 1192 (D. Or. 2015); *Millennium Pipeline Co. v. Certain Permanent & Temp. Easements*, 777 F. Supp. 2d 475, 479 (W.D.N.Y. 2011).

route of the pipeline to avoid sensitive resources and protect water and air quality. Because the route is subject to change until all mandatory authorizations are issued, it is impossible to know whether any parcel of land is "necessary" for the applicant's project. Therefore, a certificate conditioned on receiving additional federal authorizations should never be confused with a grant of unfettered eminent domain authority under Section 7(h).

iii. *The Fifth Amendment's Public Use Requirement*

Even a justly compensated taking is not authorized by the Fifth Amendment unless that taking has satisfied the threshold requirement: a public purpose.[201] The information revealed by environmental analyses under statutes such as the CWA, CAA, and CZMA are essential to a Fifth Amendment determination of whether the project serves a public purpose. Consequently, any exercise of eminent domain in the absence of these requisite environmental analysis cannot satisfy the public purpose requirement of the Fifth Amendment and such a taking is not valid.

Notwithstanding the foregoing, if the Commission were determined to adhere to its current practice of issuing preliminary certificates that precede CWA, CAA, and CZMA authorizations, the Commission should only delegate the condemnation authority of Section 7(h) commensurate with the scope of the certificate and circumscribe its grant of eminent domain authority to only those survey access rights necessary to collect the additional data essential to a final determination of whether the proposed project is required by the public interest. This limited grant (circumscribed by a respect for landowner rights) would only be required in those states currently lacking the legal ability to provide pre-condemnation access for private entities

[201] *Lingle v. Chevron U.S.A., Inc.*, 544 U.S. 528, 543 (2005) ("[I]f a government action is found to be impermissible—for instance because it fails to meet the 'public use' requirement ... —that is the end of the inquiry. No amount of compensation can authorize such action.").

that need such access to complete applications for those additional federally mandated authorizations.

2. *Minimization of Eminent Domain (B2)*

The clearest path to minimizing applicants' use of eminent domain is for the Commission to adopt the clarifications and practices suggested herein for carefully assessing need in accordance with all relevant factors. Additionally, providing for a conditional exercise of temporary eminent domain authority that enables applicants to access lands across the potential project route for the limited purpose of acquiring data necessary for environmental impact analyses, while respecting landowner rights, will also minimize the use of eminent domain. Implementing such changes to the Commission's current practice would also provide applicants additional flexibility to adjust a proposed route, as applicants would no longer permanently condemn properties prior to assessing what resources exist along the route, and applicants would instead only condemn those lands necessary for constructing the proposed pipeline.[202]

3. *Incorporating Eminent Domain into the Need Analysis (B3)*

The Commission's consideration of the potential use of eminent domain is addressed above, in response to Question B1. It would appear from Question B3 that the Commission is essentially concurring with our response to Question B1, which describes how the Commission's

[202] *See* 15 U.S.C. § 717f(h) (allowing condemnation to obtain "the **necessary** right-of-way to construct, operate, and maintain a pipe line" (emphasis added)); *Midwestern Gas Transmission Co. v. Dunn*, No. M2005-00827-COA-R3-CV, 2006 WL 464113, at *2 (Tenn. Ct. App. Feb. 24, 2006) (Providing a state right of access for a proposed interstate pipeline because "Midwestern pointed out that if it could not obtain a right of temporary entry to the properties along the proposed route to conduct the requisite examinations and surveys, it would be required to file condemnation proceedings against all potentially affected properties without knowing whether these properties were even suitable for the construction and maintenance of a natural gas pipeline. According to Midwestern, this option would result in takings of private property that might ultimately prove unnecessary for the final project.").

current practice does not properly weigh the use of eminent domain in its NGA analysis. Question B3 suggests that one possible reason for the Commission's failure to do so is that the Commission remains unclear regarding how to assess and evaluate those impacts. As set out below, we propose specific tools and timing for the Commission to deploy in its future analyses weighing the use of eminent domain against the purported showing of economic need.

First, to truly incorporate the risks of eminent domain into a NGA analysis, the Commission must consider not only the extent of post-certificate eminent domain use by applicants, but also the extent of **pre**-certificate actions by applicants to assert an unfair bargaining advantage over landowners. The Commission's current practice of merely considering the post-certificate "amount of eminent domain used" fails to accurately measure the costs for landowner-condemnees as well as for those landowners who settle on unfair terms. Given the Commission's almost 100 percent approval rate for Section 7 applications and some applicants' use of strong-arm tactics,[203] the Commission cannot rely on an applicant's representation that its exercise of eminent domain will be limited. As the gatekeeper to an applicant's ability to command disproportionate bargaining power, given the applicant's likely recourse to eminent domain, the Commission must investigate and consider the record of how that power has been abused.

Given the above evidence of harm, the Commission should require applicants to submit proposed landowner offer letters so that the Commission can ensure that the applicant is not

[203] PennEast Pipeline's "offer" to Loretta Varhley exemplifies this problem. PennEast's letters to Mrs. Varhley offered to purchase a set of rights exceeding the right to lay down a pipeline and threatened her with an eminent domain action if she failed to accept their offer. PennEast withheld information essential to Mrs. Varhley's decision, such as whether the eminent domain action would concern the right to lay a pipeline or the larger bundle of rights demanded by PennEast. PennEast also imposed short deadlines that curtailed Mrs. Varhley's ability to review the offer and her alternatives. Declaration, *PennEast Pipeline Co. v. Permanent Easement for 0.18 Acres in Hopewell Township*, No. 3:18-cv-01776 (D.N.J. Feb. 7, 2018).

using the certification process to obtain rights beyond to which it would be entitled under the scope of the requested certificate. Doing so would be an important step toward the Commission's careful administration of its NGA authority.[204] It would also be consistent with a crucial underlying purpose of the NGA: "to protect consumers against exploitation at the hands of natural gas companies."[205] Specifically, the Commission could: (1) require the applicant to submit copies of letters offering to contract for survey access; (2) provide form letters to the applicants; and (3) institute a financial penalty system for applicant agents who affirmatively abuse the potential delegation of federal eminent domain authority. For example, land agents often inform residents that if they do not agree to sell or provide access, that the applicant will simply condemn their property.[206]

---

[204] If the government itself were exercising the power of eminent domain, it would have a duty to fairly compensate landowners whose property was subject to condemnation. *See, e.g.*, Va. Code. § 25.1-230 ("each member of the body determining just compensation shall take an oath before an officer authorized by the laws of this Commonwealth to administer an oath that he will faithfully and impartially ascertain the amount of just compensation to which a party is entitled."); *F.M.C. Stores, Co. v. Morris Plains*, 100 N.J. 418 (1985) ("[I]n the condemnation field, government has an overriding obligation to deal forthrightly and fairly with property owners…. It may not conduct itself to achieve or preserve any kind of bargaining or litigational advantage over the property owner…. Its primary obligation is to comport itself with compunction and integrity, and in doing so government may have to forgo the freedom of action that private citizens may employ in dealing with one another."). Here, as the power of eminent domain is being exercised under delegation to a private pipeline company, far from being impartial, it is charged with economically benefiting its shareholders and seeks to pay the lowest possible amount for "compensation." The Commission, to ensure the constitutional administration of the eminent domain power it administers, can require applicants to conform its offers to its initial appraisal. In practice, applicants advise landowners that they will use an alternative, far lower appraisal in condemnation proceedings, wielding the impending certificate as a sword to eviscerate any "bargaining power" a market-based land sale presumes.

[205] *Fed. Power Comm'n v. Hope Gas Co.*, 320 U.S. 591, 610 (1944); *see also Cal. Gas Producers Ass'n v. Fed. Power Comm'n*, 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.").

[206] *See* Editorial, Ann Neumann, *A Pipeline Threatens Our Family Land*, N.Y. TIMES (July 12, 2014), https://www.nytimes.com/2014/07/13/opinion/sunday/a-pipeline-threatens-our-family-land.html (recounting land agents' typical response when landowner asks what happens if they will not consent to a contract for access: "Williams Partners, an Oklahoma-based natural gas transporter, would prefer to negotiate, he cheerily said, but the company would invoke the federal right of eminent domain if she didn't."); Lisa Sorg, *Opponents of the Atlantic Coast Pipeline: "Nobody is saying what's happening to the little people,"* N.C. POLICY WATCH (Feb. 16. 2017), http://www.ncpolicywatch.com/2017/02/16/opponents-atlantic-coast-pipeline-nobody-saying-whats-happening-little-people/ (several months before the Commission issued a certificate for the Atlantic Coast Pipeline, it was reported that "[a]t least a half-dozen property owners have told stories of intimidation by

Second, it is indeed possible for the Commission to reliably estimate the amount of eminent domain a proposed project may use and to consider that information during its application review process. The Commission can elicit condemnation data from the applicant at several points during the process. The pre-filing process affords the first opportunity to collect eminent domain data. The applicant's initial filing must include: a "detailed description of the project, including location maps and plot plans ... that will serve as the initial discussion point for stakeholder review"; a list of stakeholders who have already been contacted, if any; and a plan to facilitate stakeholder participation.[207] The detailed description requirement ensures that the applicant knows which lands need to be acquired. The Commission can use the latter two requirements to seek an applicant's estimate of the extent to which negotiation for those lands will be required and successful. The Commission is also entitled, during the pre-filing process, to arrange stakeholder meetings attended by the applicant.[208] The Commission can use these opportunities to solicit further estimates.

Applicants who do not participate in the pre-filing process can be required to estimate potential condemnation in their applications. Existing regulations require that each application include a description of the project (with a geographical map) and facts showing that the project is required by the public convenience and necessity.[209] The Commission should implement these regulations to require an estimate of the condemnation needed for the project: the project description will indicate which lands may need to be condemned, and the landowners' interests

land agents, of low-ball prices offered for their property. The threat is, they say, sell now or get even less if the utilities have to invoke eminent domain.").

[207] 18 C.F.R. §§ 157.21(d)(4), (7), (11).

[208] 18 C.F.R. § 157.21(f)(8).

[209] 18 C.F.R. §§ 157.6(b)(2), (4); 157.14(a)(6).

bear on the analysis of public convenience and necessity. Alternatively, the Commission should require the applicant to submit an estimate of anticipated condemnation as one of the "additional exhibits necessary to support or clarify [the] application,"[210] because this estimate is essential to the Commission's analysis of public convenience and necessity.

Under existing regulations, applicants are required to notify all affected landowners, and afterwards to submit an updated list of affected landowners to the Commission, indicating those who could not be notified.[211] This is a good time for the applicant to revise its estimate of potential condemnation. From the time a pipeline developer files the application, the Commission can and frequently does require applicants to submit additional data.[212] Under its existing regulations, the Commission is well-positioned to solicit eminent domain data at regular intervals throughout its review process.

Absent the applicant's submission of executed contracts for land acquisition, the Commission must assume that all properties can only be acquired through condemnation. By keeping itself apprised of the applicant's expected use of condemnation authority throughout the process, the Commission can ensure that the applicant chooses a route that minimizes conflict and can prevent the applicant from using its strong negotiating position to obtain more rights than the certificate would potentially authorize.[213]

---

[210] 18 C.F.R. § 157.14(b).

[211] 18 C.F.R. §§ 157.6(d)(1), (5).

[212] 18 C.F.R. § 157.14(c).

[213] The "material impact" of eminent domain authority on pipeline-landowner negotiations is noticed in *Bluegrass Pipeline Co., LLC v. Kentuckians United to Restrain Eminent Domain, Inc.*, 478 S.W.3d 386, 390 (Ky. Ct. App. 2015)., *review denied*, No. 2015-SC-000330-D, 2016 Ky. LEXIS 77 (Feb. 10, 2016).

4. *Considering Landowner Interests (B4)*

The current process, as set out above, neither quantifies nor assigns any weight to impacts on either landowners' interests or the land's functional and intrinsic value. Having failed to account for landowner interests, the Commission cannot determine what weight they can and should bear on the Commission's assessment of whether a project is required by the public interest. There are several tools available to the Commission to fill this gap to properly weigh landowner and public interests in the lands an applicant proposes to condemn.

The Commission could quantify these interests using Benefit Transfer Methodology (BTM): an accepted tool used to assess the economic value of "ecosystem services" (benefits arising from ecosystems). It already has been used to put a price tag on the environmental effects of the Mountain Valley Pipeline.[214] A BTM analysis begins with taking account of the types of land use in the study area: the Mountain Valley study uses the satellite-collected data in the National Land Cover Dataset.[215] Analysts like Earth Economics compile databases of ecosystem services provided by various types of land use, as well as the yearly economic value of those services.[216] To value the ecosystem services provided by a project site, the Commission would multiply the yearly value of each service by the units (e.g., acres) of land providing it. The sum of these values is the yearly value of all ecosystem services from the project site. The stream of

[214] *See generally* Spencer Phillips, Ph.D., Sonia Wang, & Cara Bottorff, *Economic Costs of the Mountain Valley Pipeline: Effects on Property Value, Ecosystem Services, and Economic Development in Virginia and West Virginia*, KEY-LOG ECONOMICS LLC (May 2016). https://www.appalachiantrail.org/docs/default-source/a.t.-footpath-documents/06-14-17---mvp-blog-post-by-diana-christopulos/economiccostsofthemvp_technicalreport_final_201605.pdf?sfvrsn=2.

[215] *Id.* at 15.

[216] Earth Economics provides ecosystem valuation services using its own database. *See Ecosystem Services Valuation*, EARTH ECONOMICS, http://www.eartheconomics.org/ecosystem-service-valuation/ (last accessed July 23, 2018); *Ecosystem Valuation Toolkit*, EARTH ECONOMICS, http://www.eartheconomics.org/ecosystem-valuation-toolkit (last accessed July 23, 2018).

yearly ecosystem services can be capitalized[217] like any other income stream—although it has been suggested that the discount rate should be lowered to accommodate certain unique qualities of ecological resources.[218]

5. *Access to Rights-of-Way (B5)*

While ideally avoided, when an applicant is unable to access a proposed project's route to collect data before the Commission makes a Section 7(e) determination, the need for some limited exercise of eminent domain delegation may become important, both to protect landowners from permanent condemnation, as well as to ensure a robust public interest analysis. An applicant's inability to survey the right-of-way can preclude data collection essential to reasoned decision-making. Because of the Commission's current practice of delegating full eminent domain authority or none at all, certain projects can bring its duties into collision: the Commission cannot authorize a project without a full environmental analysis under NEPA and cannot make a final finding of public interest absent state CWA certification, for example, yet, an pipeline applicant cannot obtain the necessary environmental information to complete these reviews without access to the resources at stake.

The Commission's final public interest determination under the NGA must be based on a full accounting of relevant environmental impacts, which includes issues that may be present on the potential right-of-way. While some states grant access for surveying purposes to pipeline

[217] Capitalization of a series of payments is the calculation of the total present value of all the payments, accounting for the "time value of money:" the fact that a nominal amount is worth more when received sooner, and less when received later. The reduction in value per unit of time (usually a year) is the "discount rate," which depends on factors such as the rate of interest and the uncertainty of the payment.

[218] Aaron Schwartz & Maya Kocian, *Beyond Food: The Environmental Benefits of Agriculture in Lancaster County, Pennsylvania* at 21–22, EARTH ECONOMICS (July 2014), https://conservationtools-production.s3.amazonaws.com/library_item_files/1414/1398/Earth_Economics_Lancaster_rESV_2014_FINAL.pdf?AWSAccessKeyId=AKIAIQFJLILYGVDR4AMQ&Expires=1532384187&Signature=dxDfmFOE7S7hm9%2F1%2B5rfO0ZlbSI%3D.

companies, others preclude applicants for Commission certification from entry and, therefore, survey of lands along the potential pipeline route. For projects that traverse states lacking pre-certification property access, if the Commission continues to issue certificates conditioned on the applicants' receipt of Section 401 CWA authorization, for example, then the Commission should attach a certificate condition limiting the applicants' exercise of eminent domain authority to a temporary right of access to collect such data necessary to obtain these other mandatory authorizations. In doing so, the Commission would give proper meaning to the NGA's circumscription of the delegation of eminent domain authority to those lands necessary for construction of the project. Moreover, the Commission would resolve the outstanding constitutional questions surrounding applicants' use of initial authorizations—which are not authorizations to construct under the NGA—to condemn properties prior to the applicant receiving all mandatory authorizations. This would also conserve Commission resources currently expended on vetting projects that cannot pass these other federally mandated authorizations for their preferred project route.

Setting aside the inherent inability of any agency to engage in reasoned decision-making concerning unexplored and undisclosed environmental harms, the Commission has no current mechanism to rectify its decision if (and when) such harms are finally, properly disclosed, including in circumstances where a pipeline applicant is post-certificate and is universally able to access lands for survey purposes. Without revisiting its initial public interest determination after it obtains the substantive environmental data frequently lacking at the time it issues a conditional certificate, the Commission cannot meet its legal obligation to only approve pipelines that serve the public interest under the NGA.

There are a few possible means for the Commission to meet its legal obligation to compare the costs and benefits to yield an appropriate final public interest determination. First, the Commission can require that the applicant submit applications that contain all data necessary to make such a determination from the outset. Second, if the application is not complete to begin with, the Commission should prepare a supplemental Environmental Impact Statement (EIS) when the missing information is submitted, revisiting its initial finding that the project serves the public interest. Either of these would improve the current process.

Having addressed the Commission's eminent domain questions, we now turn to its questions regarding the Commission's consideration of environmental impacts.

C. The Commission's Consideration of Environmental Impacts and NEPA(C1-C7)

In NOI Questions C1-C7, the Commission asked a series of questions relating to the review of projects' environmental impacts under NEPA and the NGA. Given its relationship to the Commission's NGA analysis, we addressed most of NOI Question C6 in Section III.A, *supra*. The following provides responses to the Commission's other questions under subsection C, some additional thoughts on NOI Question C6, and additional feedback on the Commission's conduct of environmental reviews to date, including decisions the Commission has taken during the pendency of the comment period on the NOI.

1. *Overarching Issues*

a. The Commission Cannot Use Uncertainty to Avoid NEPA Reviews

As an overarching comment, it is critical to remember that, even in the face of uncertainty, "[t]he basic thrust of an agency's responsibilities under NEPA is to predict the environmental effects of a proposed action before the action is taken and those effects are fully

known."[219] NEPA requires agencies to consider uncertainty when deciding whether to evaluate the environmental impacts of a proposed action, and to eliminate that uncertainty as much as possible where it exists.[220] When the record lacks information, an agency must seek to supplement it. NEPA also requires that all useful information be used in an agency's analysis, even information that lacks pinpoint accuracy, including ranges, estimates, and values derived from modeling. The Commission cannot use the presence of uncertainty as an excuse to ignore impacts and accord them no weight in a public interest analysis.[221]

Contrary to its obligation under NEPA to take a "hard look" at all reasonably foreseeable direct and indirect adverse environmental impacts, the Commission has used uncertainty as a justification for refusing to fully analyze certain impacts. For example, the Commission has claimed that because it "does not have meaningful information about future power plants, storage

[219] *See Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973); *see also Sierra Club v. Dep't of Energy*, 867 F.3d 189, 198 (D.C. Cir. 2017).

[220] 40 C.F.R. § 1508.27(b)(5) ("The following should be considered in evaluating intensity ... the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks."); *see also Alaska v. Andrus*, 580 F.2d 465, 473 (D.C. Cir. 1978), *vacated in part by Western Oil & Gas Ass'n v. Alaska*, 439 U.S. 922 (1978) ("NEPA does, unquestionably, impose an affirmative obligation to seek out information concerning the environmental consequences of proposed federal actions."). While an agency does not have to analyze every uncertainty within the environmental analysis, it must address uncertainties raised by outside parties that have reasonable support. *Lands Council v. McNair*, 537 F.3d 981, 1001 (9th Cir. 2008).

[221] *Potomac All. v. U.S. Nuclear Regulatory Comm'n*, 682 F.2d 1030, 1036 (D.C. Cir. 1982) ("It is well recognized that a lack of certainty concerning prospective environmental impacts cannot relieve an agency of responsibility for considering reasonably foreseeable contingencies that could lead to environmental damages."); *City of Davis v. Coleman*, 521 F.2d 661, 676 (9th Cir. 1975) ("[W]e must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as a 'crystal ball inquiry.'"); *see also S. Fork Band Council v. Dep't of Interior*, 588 F.3d 718, 727 (9th Cir. 2009) (finding that uncertainty caused by the agency's "limited understanding of the hydrologic features of the area does not relieve [the agency] of the responsibility under NEPA to discuss mitigation of reasonably likely impacts at the outset."); *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 731 (9th Cir. 2001) ("An agency must generally prepare an EIS if the environmental effects of a proposed agency action are highly uncertain."); *Sierra Club v. Norton*, 207 F. Supp. 2d 1310, 1333–34 (S.D. Ala. 2002) (holding a finding of no significant impact [FONSI] was arbitrary and capricious when the agency determined there would not be a significant effect on a species while acknowledging it did not know what the effect of the project would have on the species); *Nat'l Audubon Soc'y v. Butler*, 160 F. Supp. 2d 1180 (W.D. Wash. 2001) (requiring an EIS when the agency indicates uncertainty about the significance of an anticipated environmental impact); *Makua v. Rumsfeld*, 163 F. Supp. 2d 1202, 1217 (D. Hawai'i 2001) (allowing a suit to go forward when the agency knew the predicted environmental effects but were uncertain about the "intensity and nature of those effects.").

facilities, or distribution networks," it cannot analyze the impacts of GHG emissions from burning the gas being transported in a pipeline.[222] However, NEPA does not allow the Commission to shirk its responsibility to assess an impact based on the availability of information: if the Commission knows there is a "not insignificant" risk of an impact, it must investigate that possibility.[223] Courts have made clear that even when it is impossible to know exactly where gas being transported by a proposed project will be burned, "agencies may sometimes need to make educated assumptions about an uncertain future."[224] Indeed, "some educated assumptions are inevitable in the NEPA process."[225] Where the Commission can estimate how much gas the pipeline will transport, it must "either give[] a quantitative estimate of the downstream [GHG] emissions that will result from … the pipelines … or explain[] more specifically why it could not have done so."[226]

The Commission cannot avoid its NEPA responsibilities by summarily concluding that "just ask[ing] for" the missing information "would be an exercise in futility."[227] The Commission cannot simply "rely on the conclusions and opinions of its staff … without providing both

[222] *Tennessee Gas Pipeline Co., L.L.C.*, 163 FERC ¶ 61,190, at P 52 n.114 (2018).

[223] *San Luis Obispo Mothers v. Nuclear Regulatory Comm'n*, 449 F.3d 1016, 1032 (9th Cir. 2006). Precise quantification of the risk of an adverse impact is not necessary. *Id.* at 1032. *See also Alaska v. Andrus*, 580 F.2d at 473 ("NEPA does, unquestionably, impose on agencies an affirmative obligation to seek out information…"); *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 733 (9th Cir. 2001) ("The [agency's] lack of knowledge does not excuse the preparation of an EIS; rather it requires the Parks Service to do the necessary work to obtain it."); *Tennessee Gas Pipeline Co., L.L.C.*, 163 FERC ¶ 61,190, at 3 n.5 (2018) (Commissioner LaFleur, concurring) ("One reason the Commission lacks the specificity of information to determine causation and reasonable foreseeability is because we have not asked…").

[224] *Sierra Club v. Fed. Energy Regulatory Comm'n,* 867 F.3d 1357, 1374 (D.C. Cir. 2017).

[225] *Id.*

[226] *Id.*

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

supporting analysis and data."[228] Conclusory statements do not satisfy the Commission's burden under NEPA.[229]

Rather, the Commission is obligated to at least try to obtain the proper information, even if the information it obtains is not exact.[230] Agencies must do so, unless "the overall costs of obtaining it" are "exorbitant," or "the means to obtain it are not known."[231] The Commission has not established, for example, that the cost of obtaining further information on downstream use of the gas would be exorbitant. And while the Commission has claimed in the past that information regarding GHG emissions is impossible to obtain, it has not supported those claims, because information is deemed "unobtainable" only when there is no available methodology to procure it; here, there are several methodologies, including ones presented by EPA on the instant docket. And even if the information genuinely cannot be obtained, the Commission nevertheless must evaluate the importance of the missing information,[232] or risk the court "call[ing] into question the validity of the [agency's] conclusions about the impacts of the proposed action."[233]

At the point when the Commission decides it does not need to further research uncertainties, the agency must explain why "such an undertaking is not necessary or feasible."[234]

---

[228] *Sierra Nevada Forest Prot. Campaign v. Rey*, 573 F. Supp. 2d 1316, 1325 (E.D. Cal. 2008), *affirmed in part, reversed in part and remanded by Sierra Forest Legacy v. Sherman*, 643 F.3d 1161 (9th Cir. 2011).

[229] *See Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 154 (D.C. Cir. 1985) (finding that "[s]imple conclusory statements of 'no impact' are not enough to fulfill an agency's duty under NEPA.").

[230] *Alaska v. Andrus*, 580 F.2d 465 (D.C. Cir. 1978), *vacated in part by Western Oil & Gas Ass'n v. Alaska*, 439 U.S. 922 (1978) ("Predictions, however, by their very nature, can never be perfect…"); *Cabinet Res. Grp. v. U.S. Fish and Wildlife Servs.*, 465 F. Supp. 2d 1067 (D. Mon. 2006) ("The duty of the agency is to use theories or research methods to assess the impacts of the proposed action in the absence of an answer to that question.").

[231] 40 C.F.R. § 1502.22(a)–(b); *Fund for Animals v. Norton*, 294 F. Supp. 2d 92, 111 (D.D.C. 2003), *enforcement denied by* 390 F. Supp. 2d 12 (D.D.C. 2005) ("This failure to even consider taking the steps necessary to gather relevant information resulted in an incomplete [EIS] analysis.").

[232] 40 C.F.R. § 1502.22(b)(1)(2),

[233] *Cabinet Res. Grp. v. U.S. Fish and Wildlife Serv.*, 465 F. Supp. 2d 1067, 1099-1100 (D. Mon. 2006).

[234] *Seattle Audubon Soc'y v. Espy*, 998 F.2d 699, 704 (9th Cir. 1993).

The Commission's environmental review document must include: (1) a statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment; and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.[235]

Moreover, the Commission may not summarily exclude information from its analysis that is in the form of a range or an estimate or is the result of modeling based on claims that the information is too uncertain or imprecise.[236] NEPA allows, and in fact, requires, agencies to use ranges, for example, when evaluating climate change impacts.[237] Agencies can rely on modeling, as long as the models are supported by "reasonable science"[238] and agencies disclose any potential shortcomings associated with the model.[239] Indeed, courts have explicitly recognized

[235] 40 C.F.R. § 1502.22(b)(1); *Holy Cross Wilderness Fund v. Madigan*, 960 F.2d 1515, 1523 (10th Cir. 1992) ("If the costs of obtaining the information are exorbitant 'or the means to obtain it are not known' the agency must follow four specific steps." (referring to the four steps outlined in 40 CFR § 1502.22(b)).

[236] *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.,* 538 F.3d. 1172, 1201 (9th Cir. 2008) (rejecting the agency's attempt to refuse to analyze climate change impacts, because "while the record shows that there is a range of values, the value of carbon emissions reduction is certainly not zero."); *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1192 (D. Colo. 2014) (observing that while "there is a wide range of estimates about the social cost of GHG emissions ... by deciding not to quantify the costs at all, the agencies effectively zeroed out the cost in its quantitative analysis.").

[237] *Ctr. for Biological Diversity,* 538 F.3d. at 1201; *High Country Conservation Advocates*, 52 F. Supp. 3d at 1192.

[238] *People ex rel. Lockyer v. U.S. Dep't. of Agric.*, No. 2:05-CV-0211-MCE-GGH, 2008 WL 3863479 (E.D. Cal. Aug. 19, 2008); *Small Refiner Lead Phase-Down Task Force v. U.S. Envtl. Prot. Agency*, 705 F.2d 506, 536 (D.C. Cir. 1983) ("[A]dministrative agencies have undoubted power to use predictive models."); *see also Nw. Coal. for Alts. to Pesticides v. U.S. Envtl. Prot. Agency*, 544 F.3d 1045, 1048 (9th Cir. 2008) (holding that modeling may be necessary and even more accurate in some cases, such as here, because of the diversity and mutability of the water supply.).

[239] *Western Watersheds Project v. Salazar*, 993 F. Supp. 2d 1126, 1139 (C.D. Cal. 2012). Courts prefer for agencies to use available tools and disclose the tools' limitations, rather than ignoring them altogether. *Ctr. for Biological Diversity*, 538 F.3d 1172 at 1201 (finding that the agency should have disclosed the shortcomings of available tools rather than refuse to use them altogether); *see also WildEarth Guardians v. U.S. Bureau of Land*

the existence and usability of climate modeling.[240] The Commission therefore must proceed with its analysis even if modeling, estimates, or ranges are the only options available.

Grappling with uncertainty is the purpose of NEPA, so that agencies can anticipate and minimize adverse environmental impacts to the greatest extent possible.[241] The Commission cannot hide behind uncertainty and ignore the potential adverse effects of its actions. If the Commission is missing information needed to analyze a project's impact, NEPA requires the Commission to obtain it, even if the result is approximated. If the information is exorbitant to obtain or unavailable, the Commission must still go through the four-step process to explain the uncertainties.[242] After all, "[r]easonable forecasting and speculation is … implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as a 'crystal ball inquiry.'"[243]

b. The Commission Must Prioritize Environmental Justice Issues

In addition, as an overarching principle, the Commission must improve its consideration of environmental justice issues when evaluating projects and considering alternatives. By enacting NEPA, Congress declared that "each person should enjoy a healthful environment," a goal that is thwarted when federal agencies allow communities of color, low-income

Mgmt., 870 F.3d 1222, 1237 (10th Cir. 2017) ("[T]he climate modeling technology exists: the NEMS [National Energy Modeling System] program is available for the [agency] to use."); *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549 (8th Cir. 2003) (citing 40 C.F.R. § 1502.22) ("Contrary to [the agency's] assertion, when the nature of the effect is reasonably foreseeable but its extent is not, we think that the agency may not simply ignore the effect."); *Friends of Capital Crescent Trail v. Fed. Transit Admin.*, 877 F.3d 1051, 1065 (D.C. Cir. 2017) (noting that "[l]ocal land use planning documents are inherently less concrete than numerical estimates based on pipeline capacity and contractual usage commitments").

[240] *WildEarth Guardians*, 870 F.3d at 1236 ("We do not owe the [agency] any greater deference on the question at issue here because it does not involve 'the frontiers of science.'… Moreover, the climate modeling technology exists.").

[241] *Del. Riverkeeper v. Fed. Energy Regulatory Comm'n*, 753 F.3d 1304, 1310 (D.C. Cir. 2014).

[242] 40 C.F.R. § 1502.22(b)(1).

[243] *City of Davis v. Coleman*, 521 F.2d 661, 676 (9th Cir. 1975).

communities, or Indian tribes to be overburdened by pollution and proximity to big, industrial infrastructure projects, such as gas pipelines.[244] Executive Order 12,898 and related guidance from the Council on Environmental Quality (CEQ) mandate that federal agencies work to minimize potentially adverse effects on minority and low-income communities.[245] Federal actions should be scrutinized to avoid disproportionate adverse environmental effects on environmental justice communities. Agencies are required to consider whether a project's environmental impacts will place disproportionate risks or burdens on these vulnerable communities.[246]

Concerns about environmental justice are not restricted to disturbances from construction and maintenance along the route, including water contamination, or to methane leaks or other emissions from the pipeline. A hard look at environmental justice is also required because of the risk of catastrophic accidents that are inherent in gas pipeline infrastructure. The Commission should consider "[w]hether the risk or rate of hazard exposure by a minority population, low-income population, or Indian tribe to an environmental hazard is significant (as employed by NEPA) and appreciably exceeds or is likely to appreciably exceed the risk or rate to the general population or other appropriate comparison group."[247] Everyone within the blast radius of a gas

[244] 42 U.S.C. § 4331(c).

[245] Exec. Order 12,898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 59 Fed. Reg. 32 (Feb. 16, 1994); *Environmental Justice: Guidance under the National Environmental Policy Act* at 4, CEQ (1997), https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf (hereinafter CEQ, Environmental Justice NEPA Guidance).

[246] *Summary of Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 59 Fed. Reg. 7629 (Feb. 16, 1994), https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice.

[247] CEQ, Environmental Justice NEPA Guidance at 26.

pipeline route is at risk of hazard exposure that appreciably exceeds the general population. Accidents may be rare, but when they occur, they can be catastrophic.[248]

For these and related reasons, the Commission should prioritize siting transportation projects away from these environmental justice populations. But, to do so, it must first use an appropriate methodology to assess whether communities of color, low-income communities, or Indian tribes are disproportionately burdened by pipeline projects. Recently, the Commission has employed a flawed methodology that masks, rather than elucidates, environmental justice concerns.

For example, when considering environmental justice issues for the Atlantic Coast Pipeline, the Commission chose an unorthodox method for determining whether any environmental justice communities would be affected by the project. The Commission decided to limit comparisons of the racial demographics of the affected census tracts (those within a mile of the route) to the counties where those tracts are located—rather than to the state or region as a whole.[249] This flawed methodology led the Commission to make untenable conclusions. For example, the Commission decided that there were no potential environmental justice concerns in

[248] *See Serious Incidents*, U.S. Dep't of Transp. Pipeline & Hazardous Materials Safety Admin., https://www.phmsa.dot.gov/data-and-statistics/pipeline/pipeline-incident-20-year-trends (last accessed July 23, 2018) (For the 20 years from 1997 through 2016, the Pipeline and Hazardous Materials Safety Administration recorded 1,719 incidents (averaging 114 incidents a year for the last 10 years) on onshore gas transmission pipelines, with 48 fatalities and 179 injuries)); *see also Columbia Says Landslide Caused Leach Xpress Explosion/Fire in WV*, MARCELLUS DRILLING (July 12, 2018), https://marcellusdrilling.com/2018/07/columbia-says-landslide-caused-leach-xpress-explosion-fire-in-wv/ (describing a recent incident along the Columbia Leach Xpress Pipeline).

[249] *Atlantic Coast Pipeline, LLC*, Final Environmental Impact Statement, at 4-511 (July 21, 2017), Docket No. CP-15-554-000 (a "minority population exists" under the Commission's methodology if it "is greater than 50 percent or is meaningfully greater than that of the county in which it is located." In contrast, and without explanation, the Commission determined whether "a low-income population exists" by comparing the percentage those living below the poverty level with the state as a whole, rather to the county where that census tract is located.); *see also* Letter to the Editor, Dr. Ryan E. Emanuel, *Flawed environmental justice analyses,* 357 SCIENCE 6348, at 260 (July 21, 2017) (noting that the Commission's flawed environmental justice analysis for the Atlantic Coast Pipeline failed to pick up on the disproportionate impact to indigenous people in North Carolina, who make up only 1.2 percent of the population, but make up 13.2 percent of the population of those who live within 1.6 kilometers of the pipeline route).

a census tract along the pipeline route—in which the percentage of the African-American population was more than double the statewide percentage—because the overall county contained a similar percentage of African-Americans.[250] For many rural counties, most census tracts are within the designated radius of the pipeline route. In such circumstances, there will often be little difference between the demographics of affected census tracts and the demographics of the county as a whole. As a result, the Commission is left with little useful information regarding possible disparate impacts from its chosen methodology.

The Commission's demographic analysis masks the disproportionate impacts of major industrial pipeline projects. Federal environmental justice guidance calls for considering whether "the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis," such as the state as a whole.[251] When a pipeline route traverses counties and cities with higher than average minority populations, the Commission's limited comparison is too narrow to provide useful information.[252]

The Commission could avoid this flawed demographic analysis by consulting existing guidance from the Federal Interagency Working Group on Environmental Justice and NEPA. The Interagency Working Group has cautioned against the very kinds of analyses offered by the

[250] *Atlantic Coast Pipeline, LLC*, Draft Environmental Impact Statement, at Table U-1 (Dec. 30, 2016), Docket No. CP15-554-000 (concluding that census tract 111.01 in Nash County, North Carolina does not raise environmental justice concerns, even though 43.7 percent of that affected census tract is African-American, more than double the statewide percentage).

[251] CEQ, Environmental Justice NEPA Guidance at 25.

[252] Sarah Wraight, *et al*., *Environmental Justice Concerns and the Proposed Atlantic Coast Pipeline Route in North Carolina*. RTI Int'l. (2018), https://www.rti.org/rti-press-publication/environmental-justice-concerns-and-proposed-atlantic-coast-pipeline-route (RTI conducted a county-level analysis of race and ethnicity data for the North Carolina segment of the proposed Atlantic Coast Pipeline route. Statistical analyses of race and ethnicity data revealed significant differences between the areas crossed by the pipeline and the state as a whole).

Commission, noting "[s]electing a geographic unit of analysis (e.g., county, state, or region) without sufficient justification may portray minority population percentages inaccurately by artificially diluting their representation within the selected unit of analysis."[253] In addition to providing useful advice on conducting meaningful demographic analysis, the Working Group's guidance reminds federal agencies that environmental justice concerns should be considered as part of the agency's public engagement efforts. "Environmental justice analyses are meant to help regulators and developers identify and address disparate impacts on vulnerable populations at an early stage in the decision-making process. Analyses unable to detect such impacts are essentially faulty instruments that fail to warn decision-makers about potential problems ahead."[254] In addition, a more robust alternatives analysis should be triggered whenever a valid demographic analysis demonstrates disproportionate environmental burdens on environmental justice communities from a project under Commission review.[255]

The Commission should consider the disproportionate burdens and risks faced by all of those living close to a large-diameter gas pipeline, but it should pay particular attention to environmental justice effects from permanent, polluting above-ground infrastructure, particularly compressor stations. In the NEPA process, the Commission has an obligation to consider the potential adverse health effects on those who live closest to compressor stations. At pollution levels documented in recently approved pipeline projects, compressor station emissions include significant amounts of harmful pollutants, including particulate matter (PM2.5) and nitrogen

[253] *Promising Practices for EJ Methodologies in NEPA Reviews: Report of the Federal Interagency Working Group on Environmental Justice & NEPA Committee* at 21 (Mar. 2016) https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf (hereinafter *Promising Practices*).

[254] Emanuel, *Flawed environmental justice analyses* at 260.

[255] *Promising Practices* at 38.

oxides (NO_x). Long-term exposure to PM2.5 can cause an increase in mortality and serious health problems, such as respiratory ailments and cardiovascular disease.[256] Even short-term exposure can cause health problems, particularly in sensitive populations like those with respiratory problems or heart disease.[257] NO_x are a harmful pollutant in their own right and a key precursor to particulate pollution and ozone (smog).[258] A report from Physicians for Social Responsibility compiled recent scientific studies that indicate pollution from gas infrastructure, including compressor stations.[259] According to this report, a "growing body of scientific evidence documents leaks of methane, toxic volatile organic compounds and particulate matter throughout this infrastructure. These substances affect [human] health."[260]

The risks associated with such pollution should require a more refined proximity analysis and consideration of whether environmental justice communities are already overburdened with neighboring sources of air pollution. To address those instances where more granular data regarding the demographics of those who live closest to above-ground pipeline infrastructure is needed, the Interagency Working Group notes that a federal agency may want "to supplement Census data with local demographic data … [that] can improve an agency's decision-making process."[261]

---

[256] *See generally* Frank J. Kelly & Julia C. Fussell, *Air Pollution and Public Health: Emerging Hazards and Improved Understanding of Risk*, 37(4) ENVIRON GEOCHEM HEALTH 631–649 (2015), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4516868.

[257] *Id.*

[258] *Fact Sheet: Final Revisions to the National Ambient Air Quality Standards for Ozone*, EPA (2008), https://www.epa.gov/sites/production/files/2015-08/documents/ozone_fact_sheet.pdf.

[259] *See generally* Barbara Gottlieb & Larysa Dyrszka, MD, *Too Dirty Too Dangerous: Why Health Professionals Reject Natural Gas, Physicians for Social Responsibility*, PHYSICIANS FOR SOCIAL RESPONSIBILITY (Feb. 2017), http://www.psr.org/assets/pdfs/too-dirty-too-dangerous.pdf.

[260] *Promising Practices* at 21.

[261] *Id.*

c. The Commission Must Consult with All Affected Tribes

These considerations must extend to tribal communities. The Indigenous Peoples Subcommittee of the National Environmental Justice Advisory Council issued guidance on consultation and collaboration with non-federal tribes that the Commission should adopt as part of the NEPA review process: "Although such groups lack recognition as sovereigns, they may have environmental and public health concerns that are different from other groups or from the general public…. Agencies should seek to identify such groups and to include them in the decision-making processes."[262]

If the Commission only consults with federally recognized Indian tribes, it is easy to overlook the sacred lands and environmental interests of those tribes that are most directly affected by a proposed pipeline project. Consistent with this guidance, the National Congress of American Indians, the oldest and largest national organization of American Indians and Alaskan Native tribal governments, passed a resolution calling on the Commission to engage in meaningful tribal consultation with the Haliwa-Saponi, an Indian tribe recognized by the State of North Carolina, and other impacted tribal governments during the review and permitting process for the Atlantic Coast Pipeline.[263] We urge the Commission to follow the Environmental Justice Advisory Council's guidance and begin consulting with both state and federally recognized Indian tribes during the NEPA process.

[262] *Guide on Consultation and Collaboration with Indian Tribal Governments and the Public Participation of Indigenous Groups and Tribal Members in Environmental Decision Making*, NAT'L ENVTL. JUSTICE ADVISORY COUNCIL, INDIGENOUS PEOPLE'S SUBCOMMITTEE (Nov. 2000), https://www.epa.gov/sites/production/files/2015-03/documents/ips-consultation-guide_0.pdf.

[263] *Resolution No. MOH-17-054: Support for the Haliwa-Saponi Indian Tribe to Protect its Lands, Waters, Sacred Places and Ancestors*, NAT'L CONG. OF AM. INDIANS (June 2017), http://www.ncai.org/resources/resolutions/support-for-the-haliwa-saponi-indian-tribe-to-protect-its-lands-waters-sacred-places-and-ancestors.

Having established these overall guiding principles, we now turn to the specific questions raised by the NOI.

2. *The Commission's Consideration of Project Alternatives (C1)*

Central to its duties under NEPA is the Commission's obligation to consider and analyze a reasonable range of alternatives that meet the reasonably established purpose and need of the project. Consideration of alternatives is "the heart of the [EIS]," because it compels agencies to "present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public."[264] Fundamentally, an agency must "to the **fullest** extent possible ... consider alternatives to its action which would reduce environmental damage."[265] Absent this comparative analysis, decisionmakers and the public can neither assess environmental trade-offs nor avoid environmental harms.[266] Because alternatives are so critical to decision-making, "the existence of a viable but unexamined alternative renders an [EIS] inadequate."[267]

An alternatives analysis must include the agency's evaluation of a "no action" alternative.[268] This provides "the standard by which the reader may compare the other alternatives' beneficial and adverse impacts related to the applicant doing nothing."[269] To fulfill

[264] 40 C.F.R. § 1502.14(a).

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

[266] *See id.* at 1114 (NEPA's 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 the factors on their own").

[267] *Or. Natural Desert Ass'n v. Bureau of Land Mgmt.*, 625 F.3d 1092, 1100 (9th Cir. 2010) (internal alterations and citations omitted).

[268] 40 C.F.R. § 1502.14(d).

[269] *Kilroy v. Ruckelshuas*, 738 F.2d 1448, 1453 (9th Cir. 1984).

this requirement, the Commission must "compare the potential impacts of the proposed major federal action to the known impacts of maintaining the status quo."[270]

As discussed in Section III.A., *supra*, a pipeline should not be deemed to be in the public convenience and necessity under the NGA without a broad showing of need for the project that goes far beyond solely relying on the existence of precedent agreements. The Commission should instead undertake a holistic analysis of whether there is a need for an additional supply of gas in the affected area. Similarly, under NEPA, the Commission must assess the feasibility of alternatives based on a broad concept of the need for the project.[271]

For example, just as the Commission should consider end-use in its NGA analysis, it also should consider the end-use of gas to help broaden the Commission's alternatives analysis under NEPA. The Commission has stated that:

> [E]lectric generation from renewable energy sources is a reasonable alternative for reviewing generating facilities powered by fossil fuels. It is the states, however, not this Commission, that regulate generating facilities. Authorizations related to how markets would meet demands for electricity are not part of the applications before the Commission. Because the proposed project's purpose is to transport natural gas, and electric generation from renewable energy resources is not a natural gas transportation alternative, it was not considered in the EIS."[272]

If, however, the Commission requested information from the applicant about the gas's end use, and if that end use is a power plant, then the Commission could consider the broader purpose of

[270] *Custer Cnty. Action Ass'n v. Garvey*, 256 F.3d 1024, 1040 (10th Cir. 2001).

[271] *See Simmons v. U.S. Army Corps of Eng's*, 120 F.3d 664, 666 (7th Cir. 1997) (cautioning agencies not to put forward a purpose and need statement that is so narrow as to "define competing 'reasonable alternatives' out of consideration (and even out of existence)"); *Nat'l Parks & Cons. Ass'n v. Bureau of Land Mgmt.*, 606 F.3d 1058, 1072 (9th Cir. 2009) (finding a purpose and need statement that included the agency's goal to address long-term landfill demand, and the applicant's three private goals was too narrowly drawn and constrained the possible range of alternatives in violation of NEPA).

[272] *PennEast Pipeline Company, LLC*, 162 FERC ¶ 61,053, at P 212 (2018).

the pipeline to generate electricity for its alternatives analysis, rather than narrowly viewing the pipeline as only a vehicle for the gas.

A more accurate assessment of the need for a pipeline also would enable the Commission to more adequately consider whether two or more pipeline projects might be duplicative, to reduce or avoid the scope of environmental impacts that would result from building and operating multiple projects. Similarly, the Commission should more seriously consider alternative routes that include as much co-location with existing pipeline corridors or rights-of-way as possible. Co-location offers the potential to substantially limit the amount of new acreage disturbed, including limiting the number of trees that must be cut and wetlands that would be affected.

When considering route alternatives, the Commission must also improve its consideration of environmental justice issues. As outlined above, environmental justice communities already are overburdened by pollution from a variety of industrial and other development. The Commission should prioritize siting transportation projects away from these populations.

3. *The Commission's Cumulative Impacts Review (C2)*[273]

The Commission has recognized that it is required to consider cumulative impacts of a proposed project as part of its analysis under NEPA. However, the Commission's assessment of cumulative impacts often is far too narrow and fails to account for the fact that, under NEPA, "[c]umulative impacts can result from individually minor but collectively significant actions taking place over a period of time."[274] The Commission's assessment of cumulative impacts

[273] Because the Commission asked a number of questions on climate change impacts, those effects will be discussed below is a separate section. However, we note that a pipeline project's GHG emissions also must be evaluated as part of the Commission's assessment of a project's cumulative impacts.

[274] *See* 40 C.F.R. § 1508.7; *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1214 (9th Cir. 1998) ("If several actions have a cumulative environmental effect, this consequence must be considered in an EIS.") (internal quotation and citation omitted); *Grand Canyon Tr. v. Fed. Aviation Admin*., 290 F.3d 339,

must include all "impact[s] on the environment which result[] from the incremental impact of the action **when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions**."[275]

There are many environmental impacts the Commission currently does not consider in its cumulative impact analysis that could and should be captured in its NEPA analyses. A substantial proportion of the projects the Commission authorizes are within close proximity to areas of substantial gas development activities.[276] Indeed, as is discussed in Section III.C.4.a, *infra*, the Commission's approval of projects is likely to induce additional gas development activities. However, even if it is established that there is an insufficient causal connection between the project being considered and additional upstream gas development, the Commission must evaluate how even incremental effects from the project would combine with other development and affect the local and regional environment.

For example, as noted above, gas pipeline projects cause increased emissions of dangerous air pollutants, including ozone precursors, such as NO_x and volatile organic compounds (VOCs).[277] EPA has explained that ozone formation and impacts often occur "on a

342 (D.C. Cir. 2002) (observing that "it makes sense to consider the 'incremental impact' of a project for possible cumulative effects by incorporating the effects of other projects into the background 'data base' of the project at issue.") (internal quotation and citation omitted).

[275] 40 C.F.R. § 1508.7 (emphasis added).

[276] *E.g.*, *NEXUS Gas Transmission, LLC*, Final Environmental Impact Statement at 4-217–4-226 (Nov. 2016), Docket No. CP16-22; *Columbia Gas Transmission, LLC*, Final Environmental Impact Statement at 4-172–4-174, 4-229–4-231 (Sept. 2016), Docket No. CP15-514-000; *Tennessee Gas Pipeline, L.L.C.*, Environmental Assessment at 62–64 (Aug. 2016), Docket No. CP16-4-000; *Rover Pipeline LLC*, Final Environmental Impact Statement at 4-225–4-231, 4-234 (July 2016), Docket No. CP15-93; *Algonquin Gas Transmission, LLC*, Environmental Assessment, at 2-94–2-97 (May 2016), Docket No. CP16-9-000.

[277] *See, e.g.*, *Midship Pipeline Co., LLC*, Final Environmental Impact Statement at 4-188 (June 2018), Docket. No. CP17-458-000; *Dominion Carolina Gas Transmission, LLC*, Environmental Assessment at 98 (Oct. 2016), Docket No. CP16-98-000.

regional scale (i.e., thousands of kilometers)."[278] Nationwide, VOC "emissions from oil & gas operations [are] about 2.7 million tons per year," representing "about 21 percent" of the national total.[279] In some regions, gas production is the primary contributor to ozone levels that violate EPA's national ambient air quality standards.[280] Project emissions of ozone precursors therefore must be considered in connection with background levels of NO_x and VOCs at the regional level as part of the Commission's cumulative impacts analysis. When these cumulative impacts are shown to disproportionately affect environmental justice communities, the Commission must address these issues with even greater scrutiny.

Moreover, an analysis of a project's air emissions must be evaluated over the life of a project—which can span 40-to-50 years—and include reasonable forecasting of future gas development. The tools to do this analysis are readily available. EIA already uses well-accepted models to predict future production in individual gas plays: for example, the 2018 Annual Energy Outlook referred to EIA's specific predictions for the Marcellus and Utica and Permian plays.[281] The International Energy Agency similarly can predict play-level production levels.[282]

There are methodologies, including the Comprehensive Air-quality Model with extensions, which can predict how an increase in gas production in an individual gas play will affect ozone levels in neighboring regions. One study used this tool to predict that increasing gas

[278] 76 Fed. Reg. 48,208, 48,222 (Aug. 8, 2011).

[279] *Final Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States* at 20, DOE (Aug. 15, 2014), https://www.energy.gov/fe/addendum-environmental-review-documents-concerning-exports-natural-gas-united-states (hereinafter *Final Addendum*).

[280] *Id.* at 28.

[281] *Annual Energy Outlook 2018* at 67, EIA (Feb. 6, 2018), https://www.eia.gov/outlooks/aeo/pdf/AEO2018.pdf.

[282] *See IEA Sees Global Gas Demand Rising to 2022 as US Drives Market Transformation*, IEA (July 13, 2017), https://www.iea.org/newsroom/news/2017/july/iea-sees-global-gas-demand-rising-to-2022-as-us-drives-market-transformation.html.

development in the Haynesville Shale would significantly impact ozone throughout the east Texas/west Louisiana region.[283] The Bureau of Land Management also has done a similar analysis to model how gas development on federal land will affect ozone in surrounding regions.[284]

Additionally, the Commission must include impacts to natural resources in its cumulative impact analyses, including impacts to forests, wetlands, and other wildlife habitats. Many of the pipeline projects approved by the Commission entail the destruction of many acres of trees, segmentation of important forest habitats, and loss of wetlands. The Commission's analyses to date often are limited to cataloguing the lost acreage from other nearby projects and conclusory statements that no cumulative impacts will occur. This falls short of the cumulative impacts analysis required by NEPA.[285] The Commission must go beyond simple tallying and instead disclose the significance of the natural resources being impacted. Only then can the Commission genuinely address the incremental impact of a pipeline project's impacts on natural resources.[286]

---

[283] *See, e.g.*, Susan Kemball-Cook, *et al*, *Ozone Impacts of Natural Gas Development in the Haynesville Shale*, 44 ENVTL. SCI. & TECH. 9357, 9360-61 (2010), https://pubs.acs.org/doi/abs/10.1021/es1021137.

[284] *See, e.g.*, *Continental Divide-Creston Natural Gas Development Project*, Draft Environmental Impact Statement, Bureau of Land Mgmt. (Nov. 2012).

[285] *See* 40 C.F.R. § 1508.7; *see also Or. Natural Res. Council Fund v. Brong*, 492 F.3d 1120, 1132–33 (9th Cir. 2007); *Ctr. For Biological Diversity v. Nat'l Highway Transit Safety Admin.*, 538 F.3d 1172, 1217 (9th Cir. 2008) (finding that the agency's analysis of GHG emissions was inadequate because it failed to include "necessary contextual information about the cumulative and incremental environmental impacts."); *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1213 (9th Cir. 1998) ("We have warned that general statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided.") (internal quotation and citation omitted); *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 154 (D.C. Cir. 1985) (finding that "[s]imple conclusory statements of 'no impact' are not enough to fulfill an agency's duty under NEPA.").

[286] *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 896 (9th Cir. 2002) (faulting an agency for ignoring cumulative effects of multiple timber sales and their accompanying road density amendments); *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1213 (9th Cir. 1998) (faulting an agency for ignoring the cumulative erosion and sedimentation impacts caused by multiple timber sales); *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1378–80 (9th Cir. 1998) (criticizing the agency for ignoring the cumulative effects of multiple proposed timber sales on wildlife and old growth forest).

Similarly, the Commission must properly analyze the incremental impact of proposed projects on waterbodies and watersheds. Pipeline projects approved by the Commission often involve numerous crossings of rivers, streams, reservoirs, and more using methods that destabilize stream beds and require clearing of trees and other vegetation along and near rights-of-way—both of which increase erosion and sedimentation during construction and beyond. The increased erosion caused by a pipeline project must be analyzed cumulatively along with other existing contributors to erosion and other water quality problems.

4. *The Commission's Consideration of Upstream and Downstream Environmental Impacts (C3-C5, C7)*

a. The Commission Must Consider the Direct and Indirect Impacts of its Certificate Approvals

NEPA mandates that all the direct and indirect environmental effects of a project and their significance be considered in the environmental review.[287] 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."[288] Implicit in this requirement is a duty to engage in "reasonable forecasting."[289] An effect is reasonably foreseeable if it is so "likely to occur that a person of ordinary prudence would take it into account in reaching a decision."[290]

[287] *See* 40 C.F.R. §§ 1502.8(a)–(b).

[288] *Id.* at § 1508.8(b); *see also Natural 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).

[289] *Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n*, 481 F.2d 1079, 1092 (D.C. Cir. 1973) ("Reasonable forecasting and speculation is…implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as a 'crystal ball inquiry.'").

[290] *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549 (8th Cir. 2003) (internal quotation and citation omitted); *see Brady Campaign to Prevent Gun Violence v. Salazar*, 612 F. Supp. 2d 1,

The rate of gas production from an individual gas well declines over time, starting with an initial high production rate that then sharply declines during the first few years of production, followed by a slower decline in subsequent years. The decline rate for unconventional wells is notably steeper than for conventional wells, with most of the gas being produced in the first several years of a well's life.[291] One report documented as much as a 60–80 percent decline after a single year.[292] As such, to maintain or grow the rate of overall production from a field, operators must continually drill new wells. This means that even in circumstances where an applicant can demonstrate that production from existing wells is sufficient to fill a proposed pipeline when it first begins operation, new wells will need to be drilled to keep the pipeline full over time.

Despite the high likelihood that the Commission's approval of additional pipelines induces additional gas development, the Commission consistently has refused to analyze the impacts of induced upstream development, frequently because it alleges that the exact location, scale, and timing of future well development are unknowable. But, the Commission has considerable information on where and when well development will take place. Often, the applicant will make clear in its application what shale play will be used to source the gas. The Commission also can ask the applicant for information about its suppliers. Particularly in cases where the pipeline proponent is an affiliate of one or more of the suppliers, the Commission can request information from the applicant regarding the general location of the source of the gas.

21–22 (D.D.C. 2009) (finding that NEPA required the agency to analyze the foreseeable consequences that would occur as a result of the agency action).

[291] *Constitution Pipeline Co., LLC*, Request for Rehearing of Catskill Mountainkeeper at 11 (Dec. 30, 2014), CP13-499-000.

[292] *Id.* at 11 n.17.

Knowledge of the exact location, timing, and scale of well development also is not necessary for the Commission to meaningfully estimate the number of wells that would be required to supply a project. The Commission knows the total capacity of the pipeline, can obtain the average production rates and production wells in the supply region from state databases,[293] and then estimate the number of wells and the types of equipment and production methods necessary to supply the full pipeline capacity.

With information on the general location and number of wells in hand, region-level forecasting of several impacts is feasible. Increased emissions of ozone precursors from induced development activities can be calculated, along with an analysis of the impacts of those emissions at the regional level. In addition, DOE has acknowledged that regional, play-level data are sufficient to enable a review of impacts on water usage.[294] Likewise, the Commission itself previously calculated ranges of lost acreage associated with the well development that would be necessary to meet a particular pipeline's capacity.[295] Although the Commission may not be able to evaluate highly-localized impacts, it can and must meaningfully discuss how the loss of many acres could impact the broader region.

Moreover, the Commission asked whether it should adopt different criteria for evaluating indirect effects. There, however, is no basis for evaluating the significance of indirect impacts any differently than the significance of direct impacts.[296]

---

[293] *See, e.g.*, *Oil & Gas Production / Waste Reports Website,* PA. DEP'T OF ENVTL. PROT., https://www.paoilandgasreporting.state.pa.us/publicreports/Modules/Welcome/Welcome.aspx (last accessed July 23, 2018).

[294] DOE's Addendum notes that gas production in the Marcellus Shale has different water-related effects than gas production in the Eagle Ford Shale. *Final Addendum* at 11.

[295] *E.g.*, *Constitution Pipeline Co., LLC*, Final Environmental Impact Statement (Oct. 24, 2014), Docket No. CP13-499-000.

[296] 40 C.F.R. § 1508.08 (defining "effects" as both direct effects and indirect effects); *id.* at § 1508.25 (requiring agencies to consider direct and indirect impacts when determining the scope of an environmental analysis); *id*. at § 1502.16(a)–(b) (requiring discussions of environmental consequences to include "direct

b. The Commission Must Substantially Improve its Climate Change Analysis

The Commission should fully comply with the letter and spirit of NEPA by quantifying the full lifecycle GHG emissions from each proposed project and analyzing the significance of those contributions to climate change. This analysis must include downstream emissions, direct project emissions, and upstream emissions. The Commission historically has asserted that it cannot evaluate the significance of a pipeline project's lifecycle GHG emissions because there is no federally established threshold for GHG emissions. However, as EPA noted on the instant docket, methodologies exist that can assist the Commission to analyze how a project's emissions will contribute to climate change.

i. *The Commission Must Quantify and Analyze the Full Extent of Downstream CO_2 Combustion Emissions*

The Commission has a duty to quantify and analyze GHG emissions that will result from burning the gas transported by a pipeline under the Commission's jurisdiction.[297] Despite this clear requirement, the Commission chooses not to evaluate downstream emissions if there is any uncertainty about the end-use of the gas.[298] As is discussed above, uncertainty is not a justification for failing to disclose the environmental impacts of its approvals as required by NEPA,[299] and the Commission can take additional steps to learn about the intended end-use.

effects and their significance" and "indirect effects and their significance"); *City of Davis v. Coleman*, 521 F.2d 661, 666–67 (9th Cir. 1975) ("[C]onsideration of secondary impacts may often be more important than consideration of primary impacts.... While the analysis of secondary effects is often more difficult than defining the first-order physical effects, it is also indispensable.").

[297] *See generally Sierra Club v. FERC*, 867 F.3d 1357 (D.C. Cir. 2017).

[298] *See, e.g.*, *Tennessee Gas Pipeline Co., LLC*, 163 FERC ¶ 61,190 (June 12, 2018).

[299] *See* Section III.C.1.a, *supra.*

To complete this analysis, the Commission should begin by using the scientifically-tested methodologies developed by EPA, which the Commission has used before,[300] to estimate the downstream GHG emissions from a project. These methodologies assume that all of the gas transported via the proposed pipeline will be combusted.[301] This value can act as the upper bound of downstream emissions. In the event a pipeline's capacity is not fully subscribed, the Commission must, at a minimum, quantify and analyze the full-burn emissions that will result from burning the capacity that is covered in the relevant precedent agreements. Applicants should not be permitted to rely on precedent agreements to demonstrate need but refuse to use information contain therein to analyze and disclose to the public the environmental costs associated with the downstream combustion of the gas that might be transported.

The Commission has previously declined to analyze downstream emissions on the assumption that natural gas will only displace more carbon-intensive fuels, such as coal. The Commission cannot assume that such displacement will occur without any support, as it has done in previous dockets.[302] Moreover, uncertainty about whether and to what extent emissions might be offset does not justify ending the analysis.[303] The Commission can develop ranges that represent differing reasonable offset scenarios, so long as those scenarios are explained and supported by evidence.

[300] *E.g.*, *NEXUS Gas Transmission, LLC*, 160 FERC ¶ 61,022, at P 173 (2017); *National Fuel Gas Supply Corporation*, 158 FERC ¶ 61,145, at PP 189–90 (2017); *Tennessee Gas Pipeline Company, LLC,* 158 FERC ¶ 61,110, at P 104 (2017); *Rover Pipeline LLC*, 158 FERC ¶ 61,109, at P 174 (2017).

[301] *Greenhouse Gas Equivalencies Calculator - Calculations and References*, EPA https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references (last accessed July 23, 2018).

[302] *See, e.g.*, *Dominion Transmission, Inc.*, 163 FERC ¶ 61,128, at P 62 (May 18, 2018).

[303] *Sierra Club v. Fed. Energy Regulatory Comm'n*, 867 F.3d 1357, 1374–75 (D.C. Cir. 2017) ("Nor is FERC excused from making emissions estimates just because the emissions in question might be partially offset by reductions elsewhere.").

ii. *The Commission's NEPA Assessment Must Include a Full Accounting of a Project's Direct Emissions*

The Commission must ensure that it calculates all direct emissions from any project it approves. Some of the Commission's environmental reviews have failed to account for operational emissions over a reasonable lifetime of the project, and instead selected an arbitrary time frame—in some cases as little as one year.[304] In addition, most of the projects the Commission reviews involve the loss of carbon sinks through the removal of trees and other vegetation. There are methodologies available that the Commission should use to calculate these losses and to ensure that the final tally for the project's direct emissions is complete.[305]

While the Commission has included quantitative estimates of the direct GHG emissions and of the total annual GHG emissions resulting from the construction and operation of gas infrastructure in its NEPA analyses, it has not disclosed the calculation or methodology for its estimates. The Commission appears to estimate the total annual emissions of GHGs based on the total capacity for each project. However, the Commission omits significant numbers of potential emissions sources from its estimates. For example, the Commission should evaluate and disclose all direct emissions sources, including methane and carbon dioxide emissions from pipeline leaks, meter and regulation stations, dehydrator vents, pneumatic devices, and malfunctions and upsets, such as blowdowns or venting.

[304] *See, e.g.*, *Constitution Pipeline Co., LLC*, Final Environmental Impact Statement at 4-182–4-183 (Oct. 24, 2014), Docket No. CP13-499-000.

[305] *See, e.g.*, *Greenhouse Gas Equivalencies Calculator - Calculations and References*, EPA https://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references (last accessed July 23, 2018).

iii. *The Commission Must Consider Upstream GHG Emissions*

As discussed above, there is a clear and direct link between the transportation projects the Commission approves and development of upstream gas production and transmission infrastructure. The Commission is aware of the amount of gas that could be transported by the projects it approves. The Commission can use this information to apply emission factors and other forecasting tools to quantify and evaluate upstream GHG emissions.[306]

For example, recent studies have revealed that methane emissions from the gas supply chain are approximately 60 percent higher than previously estimated by EPA.[307] These emissions are predominantly pure methane, which has more than 80 times the climate warming impact of carbon dioxide over a 20-year timespan.[308] Given the contribution of methane emissions to the problem of climate change, it is imperative that the Commission include upstream GHG emissions in its NEPA analysis.

The Commission should also consider indirect emission sources, such as the emissions from the production wells supplying the gas, and the equipment and processes used to prepare the gas for transport and delivery to markets. 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, dehydrators;

---

[306] *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.

[307] *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.

[308] *See Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* at 714, Table 8.7, IPCC (2013), http://www.ipcc.ch/report/ar5/wg1/; Bobby Magill, *Scientists Seek a New Measure for Methane*, SCIENTIFIC AMERICAN (June 4, 2016), https://www.scientificamerican.com/article/scientists-seek-a-new-measure-for-methane/.

gathering and boosting stations; pneumatic devices; tanks; malfunctions and upsets; processing plants; and pipeline and meter and regulation station leaks.

As highlighted earlier, the Commission has argued that while it knows generally that gas is produced in a particular basin, there is no reasonable way to determine the exact wells providing gas transported in pipelines, nor is there a reasonable way to identify the well-specific exploration and production methods used to obtain those gas supplies. However, it is not necessary to know the exact locations of all the wells that will supply gas to the pipelines, or the methods used to obtain that gas, in order to analyze the potential impacts. This is because the Commission already knows the total capacity of the pipeline and the region from which gas will be supplied. Therefore, 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. Plus, as noted above, the Commission also could request such information from producers and marketers that have contracts to supply gas to the pipeline. This information could then be used to analyze the potential GHG emissions and to develop alternatives as well as mitigation measures to offset such emissions should the project move forward.

iv. *The Commission Must Include Climate Change Impacts in its Significance Determination*

NEPA requires that the Commission evaluate the significance of a project's contributions to climate change, even in the absence of a specific limit or threshold for GHG emissions.[309]

[309] 40 C.F.R. § 1502.2(b) ("Impacts shall be discussed in proportion to their significance."); *Ctr. For Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1223 (9th Cir. 2008) (criticizing NHTSA for finding a 0.2 decrease in carbon emissions insignificant without "any analysis or supporting data."); *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 550 (8th Cir. 2003) (finding an EIS deficient for not analyzing how the project "will affect pollutants not subject to the statutory cap," including GHG emissions); *see also* National Fuel Gas Supply Corporation, 158 FERC ¶ 61,145 at P 139 (2017) ("As to the more global issues

Specifically, NEPA requires the Commission to address the cumulative impacts of its certificate approvals. The impacts of GHG emissions on climate change are precisely the sort of impacts NEPA requires agencies to consider in a cumulative impacts analysis.[310] Climate change is a global issue caused by the collective emissions from millions of individual sources. That the emissions from any one source may be relatively small does not excuse the Commission from considering the climate change impacts of a source under NEPA. Additionally, GHG emissions can be meaningfully evaluated even when there is considerable uncertainty about the exact timing and location of the activities giving rise to the emissions.

Indeed, there are many environmental impacts the Commission regularly considers where no specific limit exists. For example, the Commission regularly evaluates whether the loss of acres of forest or wetlands is significant, 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.[311]

The Commission fails to fully analyze its approvals' impacts on climate change (and therefore, fails to meet its requirements under NEPA) when it bases its determinations of significance on a comparison to total national or global inventories. NEPA does not allow agencies to ignore environmental impacts based on their size, because small contributions can have substantial adverse effects.[312] There are benchmarks the Commission could reference in

raised, while the Commission does not utilize a specific 'climate test,' we do examine the impacts of the projects before us, including impacts on climate change.").

[310] *Ctr. for Biological Diversity*, 538 F.3d 1172 at 1217 ("the impact 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.'").

[311] *See, e.g.*, Final Environmental Impact Statement at 4-79 (Oct. 24, 2014), Docket No. CP13-499-000.

[312] *See Natural Res. Def. Council, Inc. v. Callaway*, 524 F.2d 79, 88 (2d Cir. 1975) (recognizing Congress' intent in passing NEPA to require analysis of small amounts of pollution that can have significant cumulative effects).

determining whether a certain volume of GHG emissions is significant. These include EPA's major emitter threshold of 25,000 tons per year of carbon-dioxide equivalent[313] and state carbon reduction targets.

While the Commission includes quantitative estimates of the total annual GHG emissions of gas infrastructure projects, it fails to include an assessment of ecological, economic, and social impacts of those emissions, including an assessment of their significance.[314] The Social Cost of Carbon was "designed to quantify a project's contribution to costs associated with global climate change."[315] It contextualizes costs associated with climate change and can be used to understand climate impacts and to compare alternatives. The Commission has argued that the Social Cost of Carbon is not useful for NEPA purposes because several of its components are contested and not every harm it accounts for is necessarily "significant" within the meaning of NEPA.[316] The Commission's failure to apply available tools that could be utilized to analyze the cumulative significance and severity of emissions and associated climate implications deprives the public of important information on the cumulative GHG emissions and climate implications of its certificate approvals.[317]

Further, it is not necessary to conduct a full cost-benfit analysis and monetize all of a proposed project's benefits and costs in order to consider the Social Cost of Carbon. As

[313] 40 C.F.R. § 98.

[314] 40 C.F.R. §§ 1508.8(b); 1502.16(a)-(b).

[315] *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1190 (D. Colo. 2014).

[316] *EarthReports, Inc. v. Fed. Energy Regulatory Comm'n*, 828 F.3d 949, 956 (D.C. Cir. 2016).

[317] *See Or. Natural Desert Ass'n v. Bureau of Land Mgmt.*, 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. Envtl. Info. Ctr. v. U.S. Office of Surface Mining*, CV 15-106-M-DWM 2017 WL 3480262, at *12 (D. Mont. Aug. 14, 2017) (agency acted arbitrarily and capriciously by quantifying the benefits of the mine expansion while failing to account for the costs, even though the social cost of carbon protocol was available to do so).

Commissioner Glick has recognized, "the output from the Social Cost of Carbon 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."[318]

v. *The Commission Must Consider How Climate Change Will Impact Pipelines Themselves*

The Commission should evaluate how climate change will affect pipelines once constructed. The Commission's analysis of the adverse environmental impacts of a project should consider how those impacts could be worsened because of climate change over time. It is standard practice in many industries that deal with infrastructure projects with longer lifespans to factor in the risks posed to the projects by climate change.[319]

Studies have demonstrated that gas infrastructure projects are vulnerable to climate change.[320] For example, increasing global temperatures likely will cause an increase in the number of severe weather events, including flash flooding, which can expose pipelines, leading to ruptures.[321] Exposed pipelines also can require additional in-stream work, which increases the magnitude of water quality impacts. These types of impacts are eminently foreseeable and must be considered as part of the Commission's NEPA review of projects.

---

[318] *Florida Southeast Connection, LLC*, 162 FERC ¶ 61,233, at 8 (2018) (Commissioner Glick, dissenting).

[319] *See, e.g.*, *Climate Resilient Infrastructure Procurement Plan*, WORLD BANK, *available at* http://projects.worldbank.org/P127338/climate-resillient-infrastructure?lang=en (last accessed July 23, 2018) (noting need to enhance resilience of infrastructure against impacts of climate change).

[320] *See e.g.,* John D. Radke & Greg S. Biging, *Assessment of California's Natural Gas Pipeline Vulnerability to Climate Change*, UC-BERKELEY (Jan. 2017), https://perma.cc/Q8NS-ESUV; *U.S. Energy Sector Vulnerabilities to Climate Change and Extreme Weather,* DOE (July 2013), https://www.energy.gov/downloads/us-energy-sector-vulnerabilities-climate-change-and-extreme-weather.

[321] *See, e.g.*, Jack Nicas, *Floods Put Pipelines at Risk: Records Suggest Erosion of Riverbeds Jeopardizes Oil and Gas Infrastructure*, WALL STREET JOURNAL (Dec. 3, 2012), https://www.wsj.com/articles/SB10001424127887323622904578128884280719580 (reporting that flood-caused erosion led to the rupture of two pipelines in Iowa and Montana).

vi. *The Commission Must Use Current Methane Global Warming Potential Data*

The Commission currently understates the climate impact of methane emissions by using an outdated estimate of methane's global warming potential (GWP). This is important because methane is a much more potent GHG than carbon dioxide.[322] GWP is a measure of the amount of warming caused by the emission of one ton of a particular GHG relative to one ton of carbon dioxide. The methane GWP estimates how many tons of carbon dioxide would need to be emitted to produce the same amount of global warming as a single ton of methane. Global warming potentials change based on the amount of time that has passed since the GHG was emitted; common time periods considered are 100 years and 20 years. The Commission has used an outdated 100-year GWP value for methane of 25 to assess the global warming impacts of methane emissions from various projects.[323] This is despite the fact that the Intergovernmental Panel on Climate Change (IPCC) has released a more recent 100-year GWP for fossil methane of 36.[324]

The Commission must use the most current methane GWP, and GHG emissions should be calculated using both the 20-year GWP of 87 and the 100-year GWP of 36.[325] NEPA requires

[322] *See Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* at Ch. 8, IPCC (2013), http://www.ipcc.ch/report/ar5/wg1/.

[323] *See Understanding Global Warming Potentials*, EPA, https://www.epa.gov/ghgemissions/understanding-global-warming-potentials (last visited July 23, 2018).

[324] *See Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* at Ch. 8, IPCC (2013), http://www.ipcc.ch/report/ar5/wg1/.

[325] *Id*. *See also Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas*, at 1, 8, DOE (2014), https://www.energy.gov/sites/prod/files/2014/05/f16/Life%20Cycle%20GHG%20Perspective%20Report.pdf (last accessed July 23, 2018) (using a 20-year GWP to calculate the lifecycle GHG emissions from LNG exports to European and Asian markets).

the Commission to ensure "the scientific integrity [] of the discussions and analyses in [EISs]."[326] An agency violates NEPA where its analysis is based on factual inaccuracy.[327] If the Commission continues to use outdated GWPs in its analyses, this will result in potentially drastic underestimates of the impacts of anticipated methane emissions.

c. The Commission's Recent Orders are a Step Backward

The timing of this NOI comes on the heels of a D.C. Circuit Court of Appeals decision involving the Southeast Market Pipelines Project (Sabal Trail), which compelled the Commission to quantify downstream emissions in its NEPA analysis or explain more specifically why it cannot do so.[328] Although the Commission quantified the downstream emissions in its supplemental EIS, the Commission found that there was no method to determine the significance of the emissions.[329] But shortly after the Commission issued its order on remand for Sabal Trail, the Commission shifted its policy to severely limit its disclosure and/or consideration of downstream emissions.[330] The Commission asserted that unless the end-users are identified, downstream GHG emissions are not reasonably foreseeable and any analysis of such emissions would be too speculative to be meaningful.[331] Subsequent Commission decisions have echoed this perspective.[332]

[326] 40 C.F.R. § 1502.24, *accord* 40 C.F.R. § 1500.1(b) (requiring "accurate scientific analysis").

[327] *Or.Natural Desert Ass'n v. Jewell,* 840 F. 3d 562, 570 (9th Cir. 2016).

[328] *See Sierra Club v. FERC*, 867 F.3d 1357, 1374 (D.C. Cir. 2017).

[329] *Florida Southeast Connection, LLC*, 162 FERC ¶ 61,233, at P 27 (2018).

[330] *See Dominion Transmission, Inc.*, 163 FERC ¶ 61,128, at P 41 (2018) Previously, the Commission had included a quantification of upstream and downstream emissions, even if it ended up concluding that these emissions fell outside of NEPA. *See, e.g. NEXUS Gas Transmission, LLC,* 160 FERC ¶ 61,022, at PP 120, 172 (2017).

[331] *Dominion Transmission, Inc.*, 163 FERC ¶ 61,128, at P 44.

[332] *See Tennessee Gas Pipeline Company, L.L.C.*, 163 FERC ¶ 61,190 (2018); *Florida Southeast Connection, LLC*, 163 FERC ¶ 61,158 (2018); *Mountain Valley Pipeline, LLC*, 163 FERC ¶ 61,197 (2018).

The revised Policy Statement should require pipeline project applicants to provide additional information on the origin and end use of the transported gas, quantify upstream and downstream GHG emissions, and meaningfully analyze the GHG emissions and their significance using relevant EPA tools and the Social Cost of Carbon. Since the Commission shifted its policy, Commissioner LaFleur has performed her own downstream emissions analyses utilizing the same full burn metric used in earlier decisions.[333] The EPA also has provided a useful set of tools (including those filed in the instant docket) that the Commission has relied on in the past to determine downstream impacts and could continue to utilize, along with calculator tools to compare emissions among energy sources.

5. *NEPA and the Public Interest Determination (C6)*

Although we largely covered C6 in Section III.A, *supra*, we do wish to add our thoughts with respect to the Commission's treatment of mitigation measures. The Commission frequently concludes, 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.

For example, for the Northern Access 2016 Project, the Commission assumed that National Fuel would successfully curb potential adverse impacts to water quality based on its proposed mitigation measures. But, the measures the company proposed largely relied on

[333] *See, e.g.*, *Tennessee Gas Pipeline Company, L.L.C.*, 163 FERC ¶ 61,190, at 2-3 (Commissioner LaFleur, concurring).

compliance with a general erosion and sediment control plan and were not site-specific for the geology and topography of the area, the specific waterbodies to be crossed, or the construction methods used in that case.[334] The Commission offered no rationale for why compliance with such vague plans would offer any assurance that adverse impacts to water quality would be rendered insignificant.

The Commission assumes that these general mitigation plans will sufficiently mitigate impacts to water quality, but that is not often the case. The Commission must insist on more detailed, site-specific mitigation plans that can demonstrate a greater likelihood of success in eliminating or reducing the adverse environmental impacts caused by its certificate approvals. The development of these plans also must take into consideration the impacts they have on environmental justice communities.

D. Improvements to the Efficiency of the Commission's Review Process (D1-D4)

In Questions D1-D4, the Commission seeks to improve the transparency, timing, and predictability of its certification process. However, the aforementioned DOE audit underscores that the process lacks **transparency and analytical rigor**, as opposed to timing and predictability.[335] In fact, the information gaps in the current certificate process prevented

[334] *See National Fuel Gas Supply Corp.*, Erosion and Sedimentation Control & Agricultural Mitigation Plan (ESCAMP) (2014), Docket Nos. CP15-115-000; CP15-115-001.

[335] Notably, Congress, in the Energy Policy Act of 2005, already made changes to the Commission's authority to address concerns of delay of pipeline approvals, including placing the Commission in charge of coordinating Environmental Protection Agency reviews and federal approvals needed for pipeline certification. *See generally* Paul W. Parfomak, *Interstate Natural Gas Pipelines: Process and Timing of FERC Permit Application Review* (Jan. 16, 2015). Moreover, a Commission official's testimony before Congress regarding the Commission's certificate review process does not support industry claims that the process should be shortened. *See* Testimony of Terry L. Turpin, Director, Office of Energy Projects, Federal Energy Regulatory Commission, Before the U.S. House Subcommittee on Energy and Power of the Committee on Energy and Commerce, *Hearing on Legislation Addressing Pipeline and Infrastructure Modernization* at 3 (May 3, 2017). Gas pipeline projects have been routinely approved under the current Policy Statement, and since the policy's adoption in 1999, the Commission has rejected only two of the more than 400 applications filed.

auditors—just as they have prevented staff and the Commissioners—from "verify[ing] the extent to which stakeholder comments were considered, aggregated, and reflected in the environmental documents or final orders that are issued to grant or deny applications."[336] This resonates with the intense public discontents and mistrust of the current process, which are reflected in the enclosed affidavits and countless public comments.[337] The good news is that the problems of transparency and analytical rigor are eminently solvable.

Here, we reiterate and expand on several solutions: (1) requiring applicants to make a prima facie case of "all relevant factors" offered to demonstrate public need as part of the initial application; (2) providing discovery and hearings for disputed issues of material fact; (3) creating and funding an Office of Public Participation; (4) staying construction until any and all

[336] Audit Report, *The Federal Energy Regulatory Commission's Natural Gas Certification Process*, at 4 DOE OFFICE OF INSPECTOR GENERAL (May 24, 2018), https://www.energy.gov/sites/prod/files/2018/05/f52/DOE-OIG-18-33.pdf.

[337] *E.g.*, Affidavit of Robert Mitchell Allen, who lives near the Florida Southeast Pipeline, at PP 30–32 ("I have tried to call FERC to alert them of [construction incidents]…. Turns out they had seen the video [I shot] on the internet and thanked me for being their 'eyes and ears on the ground.' But I never saw any evidence of them actually doing anything about that or any of the many issues I called in about…. One time I emailed FERC to ask about cathodic protection, which is something I knew a bit about from when I used to be a utility worker…. I asked, 'When bores are required, how do you install the wires for the cathodic protection?' I was told I would receive the description the next day, but I never heard back. This was at least a year ago. It is their responsibility and obligation to inform the public, and they are just not getting us the information we need. Even if you inform yourself and want to then file a report or complaint with FERC, it is extremely hard to figure out how to do so."); Affidavit of Susan Pantalone, who lives along the Atlantic Sunrise Pipeline, at PP 36–38 ("I have tried to get information and express my frustrations to FERC, but it feels as though they are not really taking anything the public says into account…. I have also called FERC a number of times, both the office responsible for our area and the main office in Washington, D.C. .... Then the woman at FERC says, 'We here in D.C. should be more worried than you, because we have pipelines running under the city that are 100 years old.' That just felt like such a selfish, heartless response. So I was not real happy with the people in D.C."); Affidavit of Joanna Salidis, who lives near the Atlantic Coast Pipeline, at P 9 ("I feel that the responses I received from FERC employees were inadequate and dismissive, regardless of what we were saying or what information we provided. It feels like FERC only communicates in order to pacify and check a box, not to actually respond with meaningful action to community concerns."); Affidavit of Joyce Burton, who lives along the Atlantic Coast Pipeline route, at P 10 ("I spent a lot of time working through the FERC website, which was also not particularly helpful. The site was hard to navigate and often does not work at night or in the evening. Further, it frequently gave misleading error messages that implied that I was unauthorized to view the document in question rather than merely that the site was down and that the document would be available for citizen review if I tried again the next day. I would sit there attempting to read through and understand thousands of documents and no one at FERC was available to help with the process. The site feels unfriendly to the casual landowner who is trying to learn something and utilize FERC resources. Based on this experience, it seems to me that citizen engagement is inconvenient for FERC, and so they avoid or ignore it.").

challenges to project authorizations are fully resolved; and (5) ensuring review and transparency under not only the NGA and NEPA, but also other applicable laws. We urge the Commission to adopt these solutions. Each one is feasible and necessary to achieve a transparent and rigorous process that upholds the NGA's public interest mandate.

1. *Scope and Timing of an Applicant's Burden of Proof on Public Need*[338]

As shown in the foregoing sections, the touchstone of the certificate process is a rigorous, "all relevant factors" assessment of how a pipeline project bears on the interests of the public. Yet, all too often, the process approves pipeline projects that saddle the public—especially communities of color and low-income communities—with myriad costs that are not properly identified, much less considered with any rigor. This problem stems in large part from incomplete and delayed information submittals by applicants, which seriously compromise the ability of stakeholders to participate, and to be heard in a meaningful manner regarding the project's costs.

Indeed, under the status quo, claimed benefits and costs of a project are never particularized or tested by normal discovery and hearing procedures, let alone post-certificate verification. Therefore, it is hardly possible for the Commission to reach an informed judgment of whether the benefits are genuine, or of their relative worth to the public compared to the costs or adverse impacts and alternatives available on the market.

The solution is straightforward: the Commission should require that applicants—at the earliest possible point, ideally, as part of the initial application—make a prima facie case that the project serves the public interest based on all of the relevant factors outlined above. At a

[338] We address NOI Questions D1-D4 in tandem, as our recommendations address all four questions posed by the Commission.

minimum, the applicant should be required to (1) specify in writing any and all project benefits and costs that it claims should be considered by the Commission, and (2) adduce significant evidence to support such claims. This initial showing by the applicant is both feasible and necessary for a transparent and rigorous process.

First, with respect to feasibility, many pipeline projects costs hundreds of millions if not billions of dollars; applicants that contemplate such expenditures should have the resources (and ample incentives) to conduct due diligence, which, by definition, should be performed at the outset of a project, not toward the middle or end. Due diligence in this context includes a full accounting of claimed public benefits. The feasibility of such an accounting is evidenced by the fact that it is routinely provided by applicants in other venues, such as state proceedings on whether to issue certificates of public convenience and necessity to electric generating units.

Second, holding applicants to their initial burden of proof is necessary, because arguably they are in the best position to identify and adduce evidence of the claimed benefits and acknowledged costs of their proposed projects. To be sure, the Commission and the public have critically important roles to test these claims, but they can only perform their roles once the applicant has provided complete information on a timely basis. If the applicant fails at the outset to carry its burden to identify and adduce evidence of the project's claimed benefits and costs, then the project should be rejected, and further administrative expense would be saved. On the other hand, if the applicant makes the requisite showing, then the certificate process can proceed to analyze with transparency and rigor how the claimed benefits compare to the project's costs and the available alternatives.

Moreover, the Commission has a legal obligation, under NEPA, to disclose the project's claimed benefits at the outset of its environmental review, in its statement of public purpose and

need, for good reason.[339] With this critical disclosure, stakeholders, including other agencies, can help the Commission more quickly and efficiently accomplish its own, ultimate inquiry into: (a) the full range of costs and benefits of the proposed project, (b) the full range of costs and benefits of reasonable alternatives, and (c) any additional factors that are not yet quantifiable but relevant to the interests of the public in certificate proceedings. By contrast, under the status quo, the substantial data and analytical resources of stakeholders, including other agencies, will continue to be underutilized or inefficiently deployed through a protracted certificate process.

2. *Discovery and Hearings*

Discovery and hearings on disputed issues of material fact are also feasible and necessary to achieve a transparent and analytically rigorous process. Especially because of the intense and continuing public complaints about not being heard in the current process, discovery and hearings should be allowed to promote accuracy and public confidence, including regarding whether and the extent to which the project would yield genuine public benefits. As discussed, the public convenience and necessity determination necessarily involves wide-ranging factors and thus potentially complex, technical information. Discovery and hearings are time-tested tools to test the accuracy of such information and can spur the parties to communicate in ways that are more understandable for the general public. This promotes transparency, predictability, and ultimately timing, as it may very well promote the amicable resolution of disputes via settlement.

[339] *See* 40 C.F.R. § 1502.13 ("The statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action."). *See also* 40 C.F.R. § 1502.21 ("No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment.").

3. *Office of Public Participation*

Several public interest organizations petitioned the Commission in 2016 to exercise its statutory authority to create and fund a Public Participation Office.[340] The Commission should grant the petition, because the Office could materially improve public participation as well as transparency, timing, and predictability.

In the same year as the petition, the nation's leading experts on administrative practice and procedure—the Administrative Conference of the United States—affirmed and expanded their findings and recommendations in support of an externally-facing ombudsman.[341] In setting up the Office, we urge the Commission to follow the Conference's several specific, well-researched recommendations and ensure that all stakeholders, regardless of their background or income level, have a full and fair opportunity to advocate their vital interests in certificate proceedings.

4. *Staying Construction*

The NGA provides intervenors before the Commission with rights to protect their interests, including the right to seek rehearing and judicial review.[342] The way the Commission allows construction to proceed without rendering final action on rehearing requests, however, is contrary to the NGA and prevents affected persons from protecting their interests before the agency and on appeal to federal court. More specifically, due to the Commission's current practice of issuing "tolling orders," or rehearing orders solely to announce the Commission's intent to give further consideration to rehearing requests, intervenors cannot achieve meaningful

[340] Petition to Initiate a Rulemaking to Establish the Office of Public Participation as Established by Congress and to Fund its Work (March 7, 2016), Docket No. RM16-9-000.

[341] *The Use of Ombuds in Federal Agencies*, ACUS (Dec. 14, 2016), https://www.acus.gov/sites/default/files/documents/Recommendation%202016-5.pdf.

[342] 15 U.S.C. § 717r(a)-(b).

relief, regardless of the Commission's powers to order the dismantlement of projects. The Commission typically fails to timely issue a final rehearing order on the merits of a case, which would be appealable to the court, and thus the Commission denies intervenors the means to seek relief, while simultaneously allowing the applicants to move forward with the project. Applicants may—and do—take private and public land, and start, and often complete projects—all the while irreparably harming the land, the environment, and public confidence in the procedural and substantive fairness of the certificate process. The good news is that this, too, is a problem with a ready solution: the Commission should stay construction until any and all challenges to applicable authorizations are fully resolved. Should applicants protest and claim economy injury, claims should be tested and weighed against countervailing harms to intervenors and the public at large through normal discovery and hearing procedures.

5. *Review under All Applicable Environmental Laws*

Analytical rigor plus overall efficiency would be promoted through a process that ensures that projects undergo thorough vetting under not only the NGA and NEPA, but also under other environmental laws implicated by proposed pipeline construction. Additional review is often needed under environmental statutes including the CWA, the ESA, the CZMA, and the NHPA, among others.[343] For example, consultation requirements under the ESA[344] should be factored in along with agency responsibilities under the NGA and NEPA, to ensure comprehensive compliance. The overall framework of environmental compliance should also be made plain to

[343] In addition to these laws, other laws govern certain aspects of some pipeline construction projects, such as the CAA, the Migratory Bird Treaty Act, the Safe Drinking Water Act, and the Wilderness Act.

[344] Section 7 of the ESA requires FERC, like any "action agency" in the federal government, to engage in consultation with the two expert wildlife agencies with jurisdiction over endangered species—the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service—to "insure that any action authorized, funded, or carried out by such agency…is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the adverse modification of [critical] habitat…." 16 U.S.C. § 1536(a)(2).

the public, to help facilitate meaningful public input and participation. The Commission's environmental responsibilities, and those of other affected agencies, do not end with NEPA.

IV. SUMMARY OF RECOMMENDATIONS

We live in a vastly different world than the one in which the Policy Statement was created. The Commission wisely recognizes that these differences necessitate a fresh look into how the Commission executes its duties under the NGA. As proposed above, we recommend a variety of measures that we believe will better serve the Commission in fulfilling this vital role, as well as better serve pipeline applicants, affected landowners and communities, the environment, and the public at large. These are:

- Implement a review approach that analyzes the purported economic need offered by the applicant along with all other relevant factors to ensure that only projects that are required by the public convenience and necessity receive a certificate. Relevant factors shall include, but are not limited to: (1) state policies; (2) energy demand projections; (3) potential cost savings and cost increases to consumers; (4) the purported end-use of the gas to be transported; (5) the presence of other existing or proposed pipelines; (6) environmental impacts, including, but not limited to NEPA data; (7) a pipeline's effect on competition; (8) community and landowner impacts; (9) regional considerations; and (10) precedent agreements.

- Treat precedent agreements as one relevant factor in determining whether a pipeline is needed; they are not—and should not—be universally dispositive in a need determination.

- Assign affiliate precedent agreements less probative value given their intra-corporate nature.

- Eliminate the issuance of conditional certificates to pipeline applicants relying on eminent domain authority. If the Commission does not do this, it should strictly limit eminent domain authority to applicants awaiting other federally mandated authorizations to temporary limited access for the specific purpose of conducting surveys necessary to finalize those reviews, while preserving and respecting landowner rights.

- Incorporate post-survey environmental data into the Commission's NGA and NEPA environmental reviews.

- Require pipeline applicants to submit proposed landowner offer letters to ensure that the applicant is not using the certification process to obtain rights beyond what it would be entitled under the scope of the requested certificate.

- Require applicants to continuously update the Commission with respect to the expected use of eminent domain.

- Revitalize the Commission's NEPA analysis by modifying its consideration of project alternatives, as well as upstream, downstream, and cumulative environmental impacts, including GHG emissions and climate change.

- Take affirmative steps to improve public participation and confidence in the agency. Steps to work toward this goal include, but are not limited to, creating an Office of Public Participation and ensuring that the Commission gives special consideration to environmental justice and tribal concerns.

V. CONCLUSION

The Public Interest Organizations thank the Commission for the opportunity to offer these thoughts regarding the Commission's review of proposed gas pipeline projects. We welcome future opportunities for participation, including the Commission hosting technical conferences or providing additional opportunities to comment on the NOI. We look forward to working with the Commission on these important issues.

Respectfully submitted,

Montina Cole
Natural Resources Defense Council
mcole@nrdc.org

Gillian Giannetti
Sustainable FERC Project
ggiannetti@nrdc.org

Diana Csank
Sierra Club
diana.csank@sierraclub.org

Moneen Nasmith
Earthjustice
mnasmith@earthjustice.org

Helen Kimble
Friends of Nelson
hkhelenkimble@gmail.com

David Neal
Southern Environmental Law Center
dneal@selcnc.org

Additional signatures below

Tyson Slocum
Public Citizen
tslocum@citizen.org

Richard Webster and Jessica Roff
Riverkeeper, Inc.
rwebster@riverkeeper.org
jroff@riverkeeper.org

David K. Ismay
Conservation Law Foundation
dismay@clf.org

Sam Gomberg
Union of Concerned Scientists
sgomberg@ucsusa.org

Joseph Jeeva Abbate
Yogaville Environmental Solutions
jeeva@yogaville.org

Chad Oba and Heidi Dhiyva Berthoud
Friends of Buckingham
heidi1008@gmail.com
chado108@icloud.com

Thomas Singer
Western Environmental Law Center
singer@westernlaw.org

Jen Hilburn
Altamaha Riverkeeper
jen@altamahariverkeeper.org

Jordan Macha
Bayou City Waterkeeper
jordan@bayoucitywaterkeeper.org

Myra Crawford
Cahaba Riverkeeper
info@cahabariverkeeper.org

Kemp Burdette
Cape Fear River Watch
kemp@cfrw.us

Wes Gillingham
Catskill Mountainkeeper
wes@catskillmountainkeeper.org

The Rev. Fletcher Harper
GreenFaith
fletcher@greenfaith.org

Scott Strand
Environmental Law and Policy Center
sstrand@elpc.org

Bill Snape
Center for Biological Diversity
bsnape@biologicaldiversity.org

Dr. Adrienne L. Hollis, Esq.
WE ACT for Environmental Justice
adrienne@weact.org

Hayley Carlock
Scenic Hudson, Inc.
hcarlock@scenichudson.org

Kendyl Crawford
Virginia Interfaith Power & Light
kcrawford@vaipl.org

Daniel E. Estrin
Waterkeeper Alliance
destrin@waterkeeper.org

Kathy Phillips
Assateague Coastal Trust/Assateague Coastkeeper
coastkeeper@actforbays.org

Charles Scribner
Black Warrior Riverkeeper
cscribner@blackwarriorriver.org

John Cassani
Calusa Waterkeeper
cassani@calusawaterkeeper.org

Additional signatures below

Kevin Jeselnik
Chattahoochee Riverkeeper
kjeselnik@chattahoochee.org

John Weisheit
Colorado Riverkeeper
john@livingrivers.org

Laurie Murphy
Emerald Coastkeeper
laurie@emeraldcoastkeeper.org

Gray Jernigan
Green Riverkeeper
gray@mountaintrue.org

Emily Sutton
Haw River Assembly
emily@hawriver.org

Reinaldo Diaz
Lake Worth Waterkeeper
reinaldo@lakeworthwaterkeeper.org

Carol Parenzan
Middle Susquehanna Riverkeeper
Association, Inc.
midsusriver@gmail.com

Michele Langa
NY/NJ Baykeeper
michele@nynjbaykeeper.org

Phillip Musegaas
Potomac Riverkeeper Network
phillip@prknetwork.org

Bill Schultz
Raritan Riverkeeper
raritan.riverkeeper@verizon.net

Michael Mullen
Choctawhatchee Riverkeeper
riverkeeper@troycable.net

Roger Rocka
Columbia River-Estuary Action Team
columbiariverestuaryactionteam@gmail.com

Gordon Rogers
Flint Riverkeeper
gordon@flintriverkeeper.org

Captain Bill Sheehan
Hackensack Riverkeeper
legal@hackensackriverkeeper.org

Jennifer Kalt
Humboldt Baykeeper
jkalt@humboldtbaykeeper.org

Ted Evgeniadis
Lower Susquehanna Riverkeeper
Association
lowsusriver@hotmail.com

Cheryl Nann
Milwaukee Riverkeeper
cheryl_nann@milwaukeeriverkeeper.org

Forrest English
Pamlico-Tar Riverkeeper
pamtarrk@soundrivers.org

Arthur Norris
Quad Cities Waterkeeper, Inc.
quadcitieswaterkeeper@gmail.com

Robyn Janssen
Rogue Riverkeeper
robyn@rogueriverkeeper.org

Additional signatures below

Joseph Campbell
Seneca Lake Guardian, A Waterkeeper Alliance Affiliate
senecalakeguardian@gmail.com

Mark Frondorf
Shenandoah Riverkeeper
mark@shenandoahriverkeeper.org

Isabel Hardesty
ShoreRivers
ihardesty@shorerivers.org

Lisa Rinaman
St. Johns Riverkeeper
rowerinaman@gmail.com

Justin Bloom
Suncoast Waterkeeper
jbloom@suncoastwaterkeeper.org

Andrew Hayslip
Tampa Bay Waterkeeper
andy@tampabaywaterkeeper.org

David Whiteside
Tennessee Riverkeeper
dwhiteside@tennesseeriver.org

Pamela Digel
Upper Allegheny River Project
pasmartin23@gmail.com

Rae Schnapp, Ph.D.
Wabash Riverkeeper Network
raeschnapp@gmail.com

Angie Rosser
West Virginia Headwaters Waterkeeper
arosser@wvrivers.org

Jessie Green
White River Waterkeeper
jessie@whiteriverwaterkeeper.org

Christine Ellis
Winyah Rivers Foundation, Inc.
christine@winyahrivers.org

Eric Harder
Youghiogheny Riverkeepers with Mountain Watershed Association
eric@mtwatershed.com

Melinda Booth
Yuba River Waterkeeper
melinda@yubariver.org

Date: July 25, 2018

Appendix

STATEMENT OF ROBERT MITCHELL ALLEN

I, Robert Mitchell Allen, state as follows:

1. My name is Robert Mitchell Allen. I am over the age of 18 and am competent to provide this statement. The information provided herein is based on my personal experiences, knowledge, and review of publicly available information.

2. I currently reside in Davenport, Florida, with my wife and children.

3. I have been a member of the Sierra Club since October 2017.

4. The Sierra Club's mission is to explore, enjoy, and protect the planet; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.

5. I joined the Sierra Club because I wanted to try to help and do what I can to protect the environment, and to support an organization that is doing good environmental work.

6. My property line is approximately 60 feet from the Florida Southeast Connection pipeline (FSC), and our house is about 500 feet from the pipeline. My family and I live right near mile post 5. We are in what is called the "incineration zone." This fact weighs on me every day since I first learned the pipeline route. As a dad and a husband I feel responsibility for my family's safety. Plus, my home is my biggest investment, and I feel as though it has lost a lot of value.

7. When I tell my friends who are not even environmentally conscious that my family is in the "incineration zone," they are blown away. I tell them to bring a broom and a dust pan if that thing blows up, because that is all that is going to be left of me—dust. The really sad thing is there is also an elementary school about 500 feet from this pipeline—even that did not stop the pipeline from going in.

8. The FSC pipeline is also a sad case of environmental injustice. Where the pipeline starts at the compressor station, it starts in an old right-of-way (ROW). The route starts out on that ROW and goes maybe 1.5 miles, then detours away from that existing easement. From there, just before mile post 6, it ties back into that easement that they started on. Now what is interesting is there is a gated community on the ROW where the pipeline deviates away. So instead of passing right by or through this gated community, it goes past my house and through my neighborhood, which is low income.

9. Because we live so close to the pipeline, FSC was required to send us notice of the route in the mail, but that notice did not go into much detail at all. I do not feel like it helped me understand any better where the route would be than I did before receiving the notice. I like to call it a "fluffy letter," because it really downplayed the impact this pipeline would have on my family and our property. It only said they were putting in a gas transmission line, but no more detail than that. No "fracked gas," no "methane gas," nothing. It said the whole process would not

take much time and I would not be impacted. I am sure it is a standardized letter they send out to everybody. I did not even keep the letter, because at the time it was a few months before I really understood and started paying attention to the pipeline, so I did not think much of it.

10. Then one day these surveyors showed up on my cul de sac in unmarked trucks, so I went out and asked if I could help them, thinking they were just ordinary surveyors. And that's what they implied—they said they were just surveying. They did not tell me they were surveying for the pipeline. I offered to help, since I have been here for 24 years and know the area well. That is when I noticed they were doing some kind of environmental assessment. They were behind my property digging up the gopher tortoises, tons of them. They were filling up the truck with them.

11. I still did not really become engaged until the day I saw a backhoe tipped over in the wetland near my house. I was not even sure at first if it was related to the pipeline, but the next day I went out to that wetland to film what I had seen and realized these were FSC workers. That is when I realized something wrong was going on here.

12. That incident with the backhoe is when I first started filming the problems I was seeing with the construction of this pipeline. I am a utility contractor that has done some underground and have done some Ariel utility work, so I understood a

lot of what I was seeing them doing. This led to some interactions with the workers. One time, while my friend and I were videotaping them putting the pipeline in at the wetland near my house, which they call "wetland 47," I was back there fairly early in the morning and I saw they were pumping the wetland dry, and pumping the water onto private property. Having been in this industry, I understand they are required to pump the water through water filtration bags to catch the sediment. But what I saw that day was that when the bags were not releasing the water fast enough, the workers were just cutting the bags. So I walked back toward where they were and I asked a laborer standing there, "You have permission to do this?" And he just responded "Yeah." So I asked, "From who?" So he went and got his supervisor. Once that happened, they started moving all the pipes and stuff while I was watching. I went home and called FERC to report what I had seen and was told it would be taken care of. I went back to wetland 47 an hour later and everything was back on the private property and they were back to pumping like they had been when I first approached. In fact, the trash they left behind from that operation is still back there—water filtration bags and sediment and stuff—despite the construction having been completed for about a year.

13. I also have video of workers refueling their equipment right in the wetland, including a worker picking up a tub of something and dumping it right in the wetland. These companies claim to use these "Best Management Practices," and

those say a lot, but there is no one out there enforcing the rules. Except for the chief inspector who FERC hires, the pipeline companies hire their own inspectors. One FERC inspector covering 128 miles project is unacceptable. When you hire someone and train someone, they work for you and you only. They are going to turn a blind eye or else get fired. FERC should have their own inspectors, and they should hire good people who are going to do a good job.

14. They really do not disclose anything about the impact the construction is going to have on your life, or how long the construction is going to be going on. It nearly drives you insane—if they want to run their equipment 24 hours a day, they will. They do not care about disrupting things, and they do not care about your life. Your right to pursuit of happiness—they do not care. I was awaken at 7am on a Sunday morning to a tractor wiping out the trees. It is amazing how many trees and how fast they can wipe them out. These were trees that we used to enjoy seeing from our property and would have provided us some buffering from the noise and dust. They were right at the edge of my neighbor's property line. Our neighbor is a breast cancer survivor, and I try to help take care of her. I went to her house later that day, after seeing the tractor taking down all those trees, and she was sitting in there literally shaking from the stress and chaos outside. There were also all these mystery piles of dust all across her backyard, and especially as a breast cancer survivor that was distressing for her to see.

15. It was not long after that incident that our neighbor sold her house and moved away. The stress and disruption of the construction was just too much for her, plus knowing that one day she would be living next to a full blown fracked gas pipeline.

16. I thought about moving away as well. The beeping of equipment during the construction was maddening, and the concern of incineration never leaves my mind, and I worry about how all this impacts my family.

17. I am also concerned about our drinking water. We have a private well 200 feet deep, and it had never had a problem with sulphur until the construction of the pipeline. We also now have a problem with iron in our water, which was never a problem before the pipeline construction. Everything it touches gets rusty—toilets, clothes. It has been nearly impossible to get the rusty color out of our belongings.

18. I also wake up every morning concerned about how I could ever sell this piece of property without disclosing to people that they will live next door to a pipeline? The answer is I cannot, because I have a conscience. So instead I just feel trapped here.

19. Before the construction was over, my neighbor sold her property for around $80,000. Well I had my property appraised several years before anyone had even heard about this pipeline, and my property at the time was worth $237,000. Now

my neighbor's property is bigger than mine, so it must have been worth at least $237,000, yet she sold it for $80,000. I just cannot take that kind of loss.

20. I am also concerned about how the construction and the pipeline affect our natural environment, especially our lakes and wetlands. The wetland they call "wetland 47" in the project Environmental Impact Statement is right near my house and used to be one of our favorite fishing holes. It used to be about seven feet deep. In the project documents they claim they cannot mix the soils in wetlands, but I have captured video of them hauling soil up from the bottom of the wetland and mixing it with dry sand, then putting it back in the wetland. When they do this it totally changes the elevation and permeability of the wetland, and now what used to be a wetland is bone dry.

21. There used to be sandhill cranes that I enjoyed watching at wetland 47. They would return every year, but they were scared off by the construction equipment and have not been back since.

22. There is a pond right at the edge of my property. It is about 500 feet from wetland 47. The pipeline company might try to say the reason the wetland is dry is just the recent weather or something like that, but this pond's water levels have stayed relatively consistent recently, while the wetland remains dry.

23. When they were constructing the pipeline the company used a method called sheet piling. It's used in order to dig through wet areas so that the land does not

cave in. That kind of thing has to create fractures, and that is going to change the flow of water, and I think that is one of the main reasons our lakes and wetlands are not filling back up.

24. They were also doing horizontal directional drilling under a lot of these wetlands. As I have mentioned, I did utility work for more than 32 years, and I was the supervisor of an HDD rig for a time. Back then, I observed stuff ooze up around the tops of the drills, and I wanted to know more about what was in that stuff—the bentonite. When I'd ask folks higher up than me, they would tell me it was "clay," so it was natural and safe. But after spending a day pumping bentonite into the ground, I read the back of the bag for myself, the material safety data sheet, and I saw that it is not safe at all. It says do not allow to enter surface water, sub-surface water, or storm water systems and here we were pumping it practically right into these wetlands.

25. After putting out several of my videos on Facebook of the construction problems I was seeing on the FSC pipeline, I began to gain some celebrity in the area. One day I got a call from a gentleman who owned a drone and wanted to help me get some more footage. We flew the drone over the top of the HDD entry site at Wetland 25a. FSC was supposed to contain the bentonite and all of the spillage there, but in the drone footage we could see a semi-tanker of potable water dumping into the earthen containment pit, a dumpster full of bentonite bags, and 5

gallon buckets containing heavy grease, hydraulic fluids, fuel cans, two bulk fuel tanks, this was all within the wetland with water body 03b 50 feet away—just massive amounts of bentonite bags, hydraulic fluids, grease, and other stuff like that in all these vessels that are not really made to prevent things like bentonite and liquids from leaking out into our environment.

26. The drone also captured footage of the potable water in the semi-tanker dumping into the earthen containment pit, and you could see the rainbow colors swirling on top of the water in the flowback pit, which was dug right in the wetland. The pit is meant to hold the soils that get come back as the HDD drill goes into the earth, but that drilling also allows the bentonite and other drilling fluids to come back up to the surface. My understanding is that when we were looking at those rainbow colors swirling on top of the water, that indicates petroleum-based products, and this was in a earthen containment pit with on liner. This would allow for permeation and leaching of this pollutes to possible contaminate our wetlands and out water.

27. FSC claims they cleaned up those containment pits, but I have video footage of them pressure washing their equipment right in the wetland, so all of that waste is just getting washed into the wetland in the end. I also have video of FSC workers, semi-tanker and large semi-dump or min haulers, dumping toxic drilling slurry, from the earthen containment pit with the rainbow colors, onto a cattle

pasture. They are supposed to dispose of this stuff at a designated and approved "Industrial" facility, but instead I saw them dumping it out of semi-tanker, semi-dump trucks, then mixing it all in with the sand. Not far from where I saw them doing this I found a dead cow with some weird substance around its mouth that looked like bentonite to me. This is all happening about 3,000 feet to the south of my home on top of a small hill that is surrounded by wetlands and is a "active" cattle pasture .

28. In the FERC documents, FSC claims that the pipeline does not go through any known contamination sites, but it is my understanding that this is just not true. The pipeline goes through a site that used to be the Loughman Country Store, and there are at least 41 monitoring wells on that property. On a sketch of the site that I obtained from the Florida Department of Environmental Protection MapDirect website, there is a note that reads "diesel bloom." That sounds like a contaminated site to me.

29. I have also seen a lot of trouble with maintenance of traffic (MOT) around the construction site; it is horrifying. They would stage five or six semis in an area that blocked the MOT signs that said "Construction Ahead, and Be Prepare to Stop." There was a woman that was supposed to be managing the signs, but she kept dropping them (the one with slow/stop). I saw her cause an accident once this way. She and the other MOT workers did not even have radios. They were using

the horns of the trucks to signal to each other. So a semi would honk their horn, the sign men would run out and hold the stop signs out to stop the traffic and then lay the signs down, go sit in their trucks until another horn was heard. The sign are two sided for a reason, slow on one side, to slow down traffic at all times. This protects their co-workers and the public. The other side is for stopping the traffic but the slow sign is required to be held in the direction of traffic whenever workers are present and construction is in progress. It was a total mess and very unsafe for all.

30. I have tried to call FERC to alert them as soon as I see incidents like this. I called when I took that video of the backhoe tipped over in the wetland. Turns out they had seen the video on the internet and thanked me for being their "eyes and ears on the ground." But I never saw any evidence of them actually doing anything about that or any of the many issues I called in about.

31. One time I emailed FERC to ask about cathodic protection, which is something I knew a bit about from when I used to be a utility worker. It is basically secondary erosion protection, so it is important, and it is my understanding that it is required along all the pipeline. I asked, "When bores are required, how do you install the wires for the cathodic protection?" I was told I would receive the description the next day, but I never heard back. This was at least a year ago. It is their responsibility and obligation to inform the public, and they are just not getting us the information we need.

32. Even if you inform yourself and want to then file a report or a complaint with FERC, it is extremely hard to figure out how to do so. It took me weeks to figure out. First I tried calling FERC. I think most people think if you call them and talk to a FERC representative that you are basically filing a complaint. But I learned that's not the case. I guess if you do not write it down and file it in writing, it is not an official complaint, which makes no sense. It makes it way too complicated for the average every day person to just deal with these impacts as they come. And these impacts that people want to complain about, they are everlasting. And it is just near impossible for the average person to figure out how to do it. It is very frustrating when you are an honest person, and you really just want to let them know what is going on in the field, and their inspectors are turning a blind eye.

33. I thought about seeking help from a lawyer, and I would have if I had the money for it. Maybe then I would have had more knowledge to work with and been able to keep this pipeline away from my family and my property.

34. I have to be honest: I am not totally against pipelines. But the fact that they will put these pipelines in and go through all kinds of wetlands or in the bottom of lakes or next to people's homes, and there is no one investigating or enforcing regulations or Best Management Practices, that is not right. And even when the public reaches out to them, FERC will ignore you. Wetlands are a filter for our

water and are essential habitat for wildlife, and we cannot keep destroying them like this.

I declare under penalty of perjury that, to the best of my knowledge, the foregoing is true and correct.

Executed July 23, 2018

Robert Mitchell Allen

Robert Mitchell Allen

STATEMENT OF JOYCE BURTON

I, Joyce Burton, state as follows:

1. My name is Joyce Burton. I am over 18 years old. The information in this statement is based on my personal experience and my review of publicly available information.

2. My primary residence is the Shannon Farm Community in Afton, VA 22920. I have lived at my current address for approximately 20 years. Shannon Farm is a residential intentional community where people share land, encourage member-managed agriculture and businesses, and support cooperative and harmonious living situations here and in the larger world. The Atlantic Coast Pipeline route was originally planned to go through my community's property.

3. I am a member of Friends of Nelson County. I joined Friends of Nelson in 2014. I joined Friends of Nelson because I was concerned about the Atlantic Coast Pipeline going through my property and the impacts the project would have on me, my intentional community, and the Nelson County community.

4. Friends of Nelson is a community non-profit organization standing in opposition to Dominion's Atlantic Coast Pipeline project in Nelson County. Friends of Nelson's mission is to protect property rights, property values, rural heritage, and the environment for all the citizens of Nelson County, Virginia through community organizing, disseminating information, and offering guidance.

5. I am also a member of the Sierra Club. I have been a member of the Sierra Club since December 1985.

6 Sierra Club is a nationwide non-profit environmental membership organization, which has its purpose to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.

7. I have been on the board of Friends of Nelson since 2015. I have participated in various roles and activities, but currently my prime responsibility is to advocate for landowners and serve as a landowner liaison. I used mapping systems to determine which landowners were along the pipeline route in order to conduct outreach to them. This included an initiative to encourage landowners both on and off the proposed route to put large "No Pipeline" signs on their land, teaching landowners how to navigate the FERC website and submit comments, and connecting landowners to attorneys. I have tracked FERC comments to stay abreast of landowner concerns and experiences in other counties, and have tracked the signed easements between Nelson landowners and Dominion to help local landowners who want more information about what they can bargain for in negotiations so that they do not get pushed around.

8. I live and recreate near the Atlantic Coast Pipeline route, which was originally slated to run through my community's property. I am not a landowner; our community has a corporation that owns the land that we collectively cultivate and share. I hike throughout Nelson County, and it is difficult to see all of the construction markers and know what those markers mean: soon those areas will be inaccessible due to construction, or fundamentally changed and unsafe due to the pipeline running beneath them. One such area is Robert's Mountain, which has some massive trees and beautiful scenery, but the pipeline route is going through there and the resulting 125'-wide clearcut will totally change that rocky, narrow ridgetop. Another area is Horizons Village. Horizons Village is an eco-village and has common lands that I and other people from Nelson County frequently hike on, as well as a wetland conservation site. The pipeline route will go through these areas as well.

9. The first contacts we received from Dominion were requests to survey our community's property. Friends of Nelson spent over a year helping landowners fighting the surveying process, which allowed us time to educate citizens and build a coalition within the Nelson County community that is opposed to the pipeline. I have also spoken to Dominion representatives at the open houses they held. The representatives often gave misleading information and answers in response to people's questions. For example, when folks inquired about Dominion providing

crossings for easements, Dominion employees would say that is something they could do and that it would not be a problem. However, this is only something they would do if it was negotiated in the settlement, so there is no guarantee for the landowner that they will get that crossing. Further, if landowners wanted a crossing, Dominion would use that as leverage to pay significantly less for the easement. Neither of these things was disclosed to the landowners I heard asking about easement crossings at the open house I attended.

10. The first contact I received from FERC was in 2014. It was a glossy brochure about the proposed pipeline that outlines how the gas company is going to come to your home to discuss the route through your land and implied that if you did not negotiate an easement with them, eminent domain would be invoked. Though this was literally years before a Certificate of Public Convenience and Necessity had been granted, it presented the project as if it was already a "done deal". It was not helpful because we had to do a lot of work and research on our own to feel like we could have a say in the process. I spent a lot of time working through the FERC website, which was also not particularly helpful. The site was hard to navigate and often does not work at night or in the evening. Further, it frequently gave misleading error messages that implied that I was unauthorized to view the document in question rather than merely that the site was down and that the document would be available for citizen review if I tried again the next day. I

would sit there attempting to read through and understand thousands of documents and no one at FERC was available to help with that process. The site feels unfriendly to the casual landowner who is trying to learn something and utilize FERC resources. Based on this experience, it seems to me that citizen engagement is inconvenient for FERC, and so they avoid or ignore it.

11. Our community's Pipeline Committee hired Appalachian Mountain Advocates to help us during the surveying process. The attorneys were helpful in delaying the surveying process and thoroughly outlining our rights and possible routes of action. I personally, acting through Friends of Nelson, helped connect Nelson County landowners to other eminent domain lawyers. These lawyers have been essential in helping landowners, both during survey disputes as well as during the negotiation of settlements.

12. I think FERC needs to make many changes to its pipeline process, but particularly FERC must find ways to provide proper relief to landowners. The eminent domain easement does not account for potential business impacts of having a pipeline on your property if one does business on his/her property. Additionally, landowners have to pay a lot of money and spend a lot of time learning to deal with the situation – not to mention the cost of hiring lawyers or appraisers or other experts to prove what their property is worth -- and there ought to be compensation for this, too.

13. I understand the difficulty of trying to snake a pipeline through all of these different lands and people who are concerned, and I understand that, if a pipeline is truly needed, there will need to be compromises. However, as we saw from the tone of the very first FERC brochure, the pipeline process is stacked in favor of the pipeline companies and is too difficult and unfair for landowners. It seems like FERC isn't trying to listen to the landowners and that they rely too heavily on pipeline companies' information. It is wrong and unjust.

14. I understand that Friends of Nelson, Sierra Club, Natural Resources Defense Council, and other public interest organizations are filing comments on FERC's Pipeline Certificate Policy Statement. I am providing this statement because I am concerned about the impact of FERC's pipeline policy on my family and community, as well families and communities like ours all across the country.

I declare under penalty of perjury that, to the best of my knowledge, the foregoing is true and correct.

Executed July 20, 2018.

Joyce Burton

STATEMENT OF JOSEPH MADISON

I, Joseph Madison, state as follows:

1. My name is Joseph “Joe” Madison. I am over 18 years old. The information in this statement is based on my personal experience and my review of publicly available information.

2. My primary residence is in Faber, VA 22938. I have lived at my current address for approximately 10 years, but have lived in Nelson County since the 1980s. One of the Atlantic Coast Pipeline’s proposed routes was planned to go through property right across the street from my home.

3. I am a member of Friends of Nelson County. I joined Friends of Nelson in the summer of 2014. I joined Friends of Nelson because I was concerned about the Atlantic Coast Pipeline route being in the vicinity of my home and the impacts the project would have on me, my family, and the Nelson County community.

4. Friends of Nelson is a community non-profit organization standing in opposition to Dominion’s Atlantic Coast Pipeline project in Nelson County. Friends of Nelson’s mission is to protect property rights, property values, rural heritage, and the environment for all the citizens of Nelson County, Virginia through community organizing, disseminating information, and offering guidance for those impacted by the proposed pipeline.

5. I have been an active member of Friends of Nelson in various capacities. At the early meetings I performed songs, including an original I wrote called "Freedom." I was also active in writing letters to FERC about the proposed pipeline, letters to the editor at local papers, and letters to Dominion, the pipeline company that owns the Atlantic Coast Pipeline. I frequently called FERC to lodge complaints about the pipeline, but I did not receive much of a response to these calls and felt that they did not impact FERC's considerations.

6. I live and recreate near the proposed Atlantic Coast Pipeline route, which is going to be constructed in my neighborhood. We have a thriving community here in Nelson County and an economy that is dependent on tourism, breweries, wineries, and outdoor recreation. I worry that the construction of the pipeline will damage our local economy and thus the livelihoods of folks here. Dominion has already cut down trees in their staging area near Wintergreen Resort that I enjoy. I also frequently go fishing with my grandchildren and I enjoy hiking throughout Nelson County. I worry that the construction process will be disruptive to the local water system and forests including the Appalachian Trail, the James River, and nearby streams.

7. In particular, I am concerned that any potential leaks from the pipeline would taint the water in our community and would harm the business of our breweries and wineries, as well as the nearby creeks and rivers that supply their

water. Additionally, I am concerned about trees being cut down, which would degrade the beautiful scenery and the habitats of local wildlife. I also worry about all of the traffic and heavy machinery being on our roads and causing damage.

8. Since the proposed pipeline is not going through my property, I have only received contact from Dominion when I have contacted them myself. In response to my letters to Dominion, I received lots of glossy mail that outlined their progress on the pipeline and the measures they were taking to conserve the environment here and to mitigate the potential environmental issues. I felt that this mail was misleading and that the things they said they were doing for the environment were not enough. Dominion also promised a lot of jobs around here. One thing that has been disappointing is their failure to keep that promise. For example, there are plenty of loggers in and from Nelson County, but Dominion brought in non-local logging companies to cut down the trees.

9. Since the proposed pipeline is not going through my land, I did not get anything from FERC about landowner rights. However, as was the case with Dominion, I received glossy mail from FERC in response to my letters to the agency. This mail talked about what FERC was doing to make sure the pipeline process is fair to the community and that the company is complying with FERC rules. Of course, I perceive all of this to be lip service, as none of it really addressed my concerns.

10. The whole pipeline process has impacted my health, specifically my mental health. The pipeline hasn't been built yet, but it is on my mind all the time and I wish it was not there. It affects my sleep and my mental wellbeing. I am constantly thinking about how to stop the pipeline and worried about what will happen if it is built, it stresses me out immensely.

11. I think FERC needs to change its pipeline process to be fairer to landowners and the general community in the vicinity of a pipeline. FERC should study and seriously consider the effects of pipelines on communities. I wish that FERC took the time to truly listen to us instead of supporting the proposed pipeline by default and only offering responses that defend the pipeline process. I feel that we, and communities all over, have no choice with these pipelines. We are forced to constantly fight from behind and to worry the whole time. It is absolutely unfair. We write letter after letter and feel ineffective. FERC is just a rubber-stamp for pipelines and this needs to be changed through better citizen engagement.

12. I understand that Friends of Nelson, Sierra Club, and Natural Resources

Defense Council and other public interest organizations are filing joint comments on FERC's Pipeline Certificate Policy Statement. I am providing this statement because I am concerned about the impact of FERC's pipeline policy on my family and community, as well families and communities like ours all across the country.

I declare under penalty of perjury that, to the best of my knowledge, the foregoing is true and correct.

Executed July 24, 2018.

Joseph "Joe" Madison

Joseph "Joe" Madison

STATEMENT OF SUSAN PANTALONE

I, Susan Pantalone, hereby state as follows:

1. I am of legal age and am competent to give this statement. All information herein is based on my own personal knowledge and publicly available information unless otherwise indicated. I give this statement for use by Sierra Club and other public interest organizations for the purposes of their joint comments on the Federal Energy Regulatory Commission's (FERC) review of the 1999 Natural Gas Policy Statement.

2. I have been a Sierra Club member since July 2017. Sierra Club is a nationwide nonprofit environmental membership organization whose purpose is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.

3. I joined the Sierra Club because they have been strong in the resistance against the Atlantic Sunrise Pipeline, and I wanted to support their work in stopping this destructive project.

4. I currently reside in Elysburg, Pennsylvania on farmland I inherited from my father.

5. My grandfather first purchased this property in 1917 and, after selling the land to a neighbor, my father repurchased it in 1947. I grew up on this property and have fond memories of helping to raise chickens here. Over the years, my family worked so hard to keep up the land. Everything was done by hand. The rustic character of the land is very important to me and my family. This land is like a little heaven tucked away in rural Northumberland County.

6. Upon my marriage in 1970, my father passed nearly 7 acres of land to me to build a home.

7. My father also gave land to my sons, one has 8-9 acres that are within the hazard zone of the Atlantic Sunrise Pipeline.

8. My house is about 300 to 400 feet further from the pipeline, but is still within the 1500 foot hazard zone.

9. My father intended that his great-grandchildren be able to build a life on this property but those dreams are now ruined.

10. As approved, the Atlantic Sunrise Pipeline will cross my property (on a different parcel from the one my home is located) just 300 feet from my son's home.

11. I was first approached about a permanent easement for the pipeline across my property in August of 2014. The first time they approached my family, my mother was dying. At that time it was her property, so they came to her house,

where I was taking care of her. I told them she was not well, so I handled the encounter. They did not go into any detail at all about what this pipeline would mean for us, nothing about the danger to us or the environment. I was so stressed out and upset about my mother I just wrote them off and said no, never, no. Absolutely positively out of the question. No one was going to come on the property and do anything.

12. When my mother died not long after, Transco, the owner of the pipeline, somehow found out that she had passed and that the property had moved into my hands, so then they started coming to my house. When I met them at the door I would just tell them no, I did not even want to engage with them. Little did I know, all that time they were coming to my house they were signing agreements with other people and figuring out the route. Finally one day they said to me that if I do not sign they are just going to take it by eminent domain, that the route was already set.

13. My grandparents had cared for this land, my parents had cared for this land, and now this corporation was saying they are going to put a pipeline across the property whether I liked it or not. It made me so angry, the way they were so confident that they were going to get their way.

14. The pipeline company gave me some material to read, but it was all pro-pipeline propaganda, all sweetness and light, nothing of real substance about the

risks involved. They had the audacity to give me this one piece of paper comparing things like the chance of getting stung by a bee or the chance of getting in a car accident to the chance of a pipeline burst or explosion. I was furious that they could use numbers like that to talk about a pipeline accident and endangering my family's lives. They try to make it sound like it is no big deal.

15. Once when one of the Transco landmen came to my door, before I had done much of my own research and was still a bit naïve, I asked him, "Didn't anybody ever get hurt?" He responded, "Well, one guy was digging once and hit a pipeline." I interrupted him there and said "Need go no further. I guess there was nothing left of him." And the landman tried to change the subject real quick, and the fact that he so did not want to talk about this, that was my epiphany. I googled "pipeline explosion," and that was the beginning of my nightmare.

16. Because I held out for so long, Transco ended up taking me to court over the 0.08 acres of my property they wanted for the pipeline route. I had hired a lawyer to help with this whole fiasco. I thought I had hired the lawyer to help me fight the pipeline and keep it off of my land, but instead they just tried to find my bottom line of what I would settle for. After years of being asked about what amount of money it would take to give up land, I finally said to the lawyer, "I thought you were going to help me fight this?" And they just said no, for that you would need an environmental lawyer, and they were eminent domain lawyers. And I said,

"Well this is a nice time to tell me that." So I was very upset, and I did then talk to environmental lawyers, but because I already had another lawyer and was already in court proceedings the environmental lawyers could not get more involved with it. They tried to offer me some advice, but I guess by then they knew it was a done deal, too.

17. When I go to court with my lawyers, they seem to be buddies with the Transco lawyers. My lawyers would talk to the pipeline lawyers, and I wanted to think they were fighting for me, but it seemed more like they were working with the other side. When you go to court for the first time, you have no idea how it works and that is not a good thing. FERC or the lawyer or someone should have advised me earlier that I needed a different type of attorney.

18. The judge tried to help me understand what was going on. He said, "how much do you think your property is worth?" Now I had already said they could offer me a billion dollars and it would not be enough to put myself and my family in such danger. But the judge keeps trying to make me say a number, and I become so flabbergasted that I just blurt out a fairly high number, 50 times what Transco was offering me at that point. At that point I still had it in my head that they would not do it, that I could still keep this pipeline off my property by refusing what they were offering. But then the judge asked if I felt that what Transco was offering was a fair price, and I said yes, since it is such a small piece of the property. But I was

saying it was fair, not that I was accepting it, so we kept arguing and I kept saying no. In the end, it became clear that they were going to put this pipeline on my property whether I liked it or not, so I eventually gave in and settled. But I would rather not have the money and not have the pipeline there at all.

19. By the time we were signing the settlement, I was as angry as you can possibly imagine. I felt like it was the end of the road. Transco and FERC had just made it so my granddaughters could no longer carry on the family tradition of getting a piece of property because the piece that I thought they would inherit is also within the hazard zone and it is just not safe for them to build their lives upon.

20. The portion of my property that has been taken from me is small, but its taking has changed the character of my entire property forever. I cannot rest easy knowing that there will be a huge industrial pipeline under the land that has been put there against my will.

21. The woods that are now crossed by the pipeline corridor are used for hunting and are where my pets are buried, including my son's dogs and cats. Decades ago, I helped my parents plant Christmas trees there. That piece of property is overlooking a valley. You cannot imagine the view, it is absolutely gorgeous. And now going over there is just a nightmare. Those woods were like a little bit of heaven, but they have now been totally transformed by the Atlantic Sunrise

Pipeline. This pipeline has totally changed my peaceful existence into an everyday nightmare.

22. They began work on my property in early 2018. They started by clearing the trees, digging up the ground, and had the pipeline sitting around on my property ready to go. It was a constant reminder of the permanent risk they are now installing on my land.

23. The blasting is horrible. We can hear it from both my son's house, just 300 feet from the pipeline route, and from my house, a couple hundred feet further. It is really loud and causes both houses to shake—the doors, the windows, the whole thing. From my house it sounds like a very bad thunder storm. It is of course much worse from my son's house. We often host family members at my son's house, including a baby just over a year old, a 4-year-old, a 6-year-old, an 8-year-old, and a 13-year-old. The blasting is particularly upsetting to them and I hate to think how such young children must feel hearing those loud sounds and having the whole house shake around them.

24. Since learning that the pipeline would cross my land, it has been a constant strain. In addition to my own court proceedings regarding the property easement, I was going to township supervisor meetings, hearings, open houses, organization meetings, and other public meetings to plead my case against this pipeline. I have lost weight and have trouble sleeping.

25. I am seriously concerned about the risk of a pipeline failure and what it could mean for me and my family. According to figures from Pipeline Safety Trust, new pipelines are failing more than older pipelines, over 6% per 10,000 miles. This totally freaks me out because my son's house is located just 300 feet from the pipeline, and both his home and mine are located within the hazard area. My husband has chronic obstructive pulmonary disease, a chronic inflammatory lung disease that causes breathing difficulty, and we would have trouble getting out of our house in the event of a dangerous accident, such as a spill. That is of course not to mention what would happen to us if the pipeline ruptured or exploded. In that instance we have no chance of survival.

26. We get our drinking water from a private well, and I am very concerned about the impact on our drinking water quality from all this construction. Just a few weeks ago my son's family was on vacation so I was watering their plants and taking care of their animals while they were away. I filled up one bucket of water, a white bucket, and the water was yellow. I filled about a quarter of the bucket, and thought maybe the color had something to do with how hot and dry it was. So I filled a jar up to keep inside, because I want to get it tested, and meanwhile left the bucket overnight. When I tried to clean it the next day, whatever was in there turned my fingers yellow. My son suggested maybe it was because he was away, and sometimes when you do not run well water for a bit stuff like that builds up

when you first do turn it back on. But I had already used a ton of the water for watering the plants, and yet it was still yellow. I suspect it is related to the blasting.

27. I am also worried about how construction and operation of the pipeline will impact areas around my property, which are good wildlife habitat with a lot of rock outcrops that may provide good habitat for bats and bears. I am also concerned how the pipeline will impact Roaring Creek, which is located at the bottom of the valley on land adjacent to my property, as well as the pipeline's impacts on air quality and climate change.

28. My farmland has been enrolled in the U.S. Department of Agriculture's Conservation Reserve Enhancement Program ("CREP") for over three years. Under the CREP, I am paid not to plant on my property. This is to promote a more natural state for wildlife and erosion control, among other environmental benefits.

29. My enrollment in CREP can be terminated if these restrictions are not followed for ten years and I may be forced to pay back a large amount of money received, with interest, if the contract is terminated.

30. After the pipeline is constructed, the land will need to be reseeded to maintain compliance with CREP. Transco, however, has only committed to reseeding for three years. Any seeding beyond the three years will fall on me, and I do not have the equipment to do it. It would therefore be a heavy financial burden

on me to either purchase the equipment to reseed or else have my enrollment in the CREP terminated.

31. During the whole settlement process Transco kept telling me when they were out there working they would clean everything up, pick up any papers, and anything used in the construction will be all cleaned up when they leave each day. That is just not at all what has been happening. There are huge mountains of dirt that they have piled up about 15 feet high where they have dug the trench, and there are tons of weeds growing on top of the mountains of dirt. The sight of it is incredibly disturbing to my enjoyment of my property. They have already dug the trench, put the pipe in, and covered it up, so I do not know why those mountains of dirt are still there and are not being cleaned up.

32. One evening about three weeks ago, after all the workers were gone, my son went to check the property and he saw something white laying in the dirt. He went to see what it was, and it was a soiled t-shirt. When they first began work out there, they did not have port-a-potties, so I guess they just decided to do their business on my property and had used this shirt to clean themselves up and cover up their mess. Now when my son picked up this shirt and realized what was under and on it, he pitched it onto a mound of dirt the workers had left behind. I should have said something to them then, but I did not, I was just too angry. Several weeks later, I took my big truck and went out back to see what was going on with the

construction. I drive up to this huge pile of dirt and what do I find but that t-shirt! They still had not even bothered to pick it up! I took a photo and finally got to the workers and said I wanted to talk to the supervisor. The supervisor wrote down everything I told him, and he got in touch with his supervisor, who later called me and I just said, “What kind of an operation have you got going on here? How do I even know that the lines you are working within are correct? I want a surveyor out here and I want you to show me exactly where the lines are.” So they showed me the line, but if you do not have your own surveyor, which I did not, you just do not know. They can tell you anything.

33. Another time a man working on the pipeline came to the farmhouse on our property where we have a renter living and said he could not find his crew. He had no truck, just his hard hat, vest, and shovel. The renter then watched him walk up through our yard, even though there were stipulations that they would not go across any of our property other than that .08 acres. The cops were called because I wanted this documented. The cops came out to my place, and they went riding around but did not see the guy, and did not question any of the workers. It makes me feel really unsafe to have these men wandering around my property, and not really know anything about who they really are.

34. Another thing that is really frustrating is how this pipeline company came in to this community talking about how they were bringing jobs. But I went out to

that construction site and started asking the workers where they were from. One guy was from Pennsylvania, but from about 200 miles away from where I live. The other seven were from Colorado, Tennessee, and just about any other state out west. So that is the jobs our area got for all our trouble: none.

35. I talk about this issue with others in my community a lot. Often when I bring it up, what they are doing to our air and water and safety, people have no idea what is going on if it is not on their own property, since the company has basically no responsibility to inform or compensate them. People I talk to are shocked to hear these companies can just take your property and put you in a hazard zone like that—they have no idea.

36. I have tried to get information and express my frustrations to FERC, but it feels as though they are not really taking anything the public says into account. For example, I attended a FERC listening session at the Haas Center at Bloomsburg College a while back where FERC came in with a panel of four staff to listen to about 40 community members speak about all that was going on. I was in total amazement when one gentleman stood up and told them about the underground fires that were in the area of where this pipeline was going to go from all the old coal mining. I was thinking that this would be a dealbreaker for the pipeline. The FERC staff acted surprised. They acted like they really paid attention—the man even had pictures. But then after the whole session was over, this man and I stayed

and were talking to the four FERC people. They told us this issue was very important and they would look into it, but I do not think they did, because the pipeline is still going in. And it just feels like whatever we say, it means nothing.

37. I have also called FERC a number of times, both the office responsible for our area and the main office in Washington, D.C. This was sort of more at the beginning of it all, when I thought all I had to do was tell them what it was they were rubber stamping: putting my son's house within 300 feet of a pipeline. I thought just telling them that would solve the issue, and they would move it.

38. At first I asked about moving it, and the woman I spoke to told me to send them a picture of where the route was, because "we tell them where to put the line, they do not tell us." But then she proceeds to tell me that if FERC wants to they can put it a foot away from our house, and it just felt like I was talking to the pipeline people, because the interaction was so cold, and so awful. Then the woman at FERC says, "We here in D.C. should be more worried than you, because here we have pipelines running under the city that are 100 years old." That just felt like such a selfish, heartless response. So I was not real happy with the people in D.C.

39. With the current administration, with fossil fuels it feels like no holds barred; anything goes. And FERC just caves in and says nothing and goes right along with anything. It feels like there is no conscience there, whether it is putting

pipelines so that homes are within the “hazard zone” where there is no chance of survival within 1500 feet, or putting it right up next to your house. Based on the extraordinarily high approval rate of gas pipelines, it is like the fox watching the hen house.

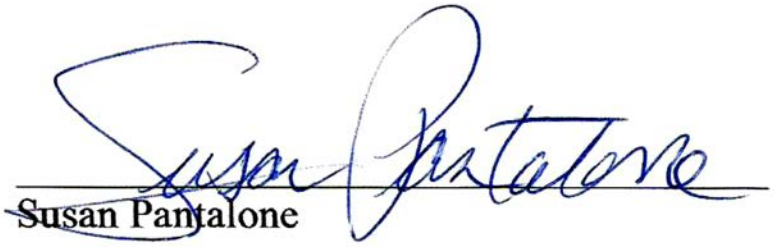
40. One thing I think FERC needs to correct is the fact that companies do not seem to be required to dig up old pipes to replace them. They wait until these pipelines rupture or leak, and only then does something happen. I know leaks can sound like a little bit of bad stuff going into a lot of water, but these harms are cumulative.

41. FERC should pay more attention to what the public is telling them, because they certainly did not seem to pay any attention when it came to Atlantic Sunrise. These pipelines are going under our rivers and our streams, and the companies do not know if they are leaking until it is too late. If they cannot come up with a plan or a law to better detect leaks and to remove old pipelines, FERC is not worried about our water or our air.

42. Before Transco proposed to cross my property with this pipeline, I was not very active in environmental issues. That all changed when the company put me and my children and grandchildren in the hazard zone. My options at this point are to move from the home that I have known my entire life or stay and feel in constant danger. It is a choice no one should have to make.

I declare under penalty of perjury, to the best of my knowledge, that the foregoing is true and correct.

Executed 23 July, 2018



Susan Pantalone

STATEMENT OF JOANNA SALIDIS

I, Joanna Salidis, state as follows:

1. My name is Joanna Salidis. I am over 18 years old. The information in this statement is based on my personal experience and my review of publicly available information.

2. My primary residence is in Afton, VA 22920. I have lived at my current address for approximately 4 years. My husband and I moved our family from Charlottesville, VA, to Afton in May 2014 for our family to enjoy the woods and have space for a big, beautiful garden. The Atlantic Coast Pipeline route was originally planned to go through my property.

3. I am a member of Friends of Nelson County. I joined Friends of Nelson in the summer of 2014. I joined Friends of Nelson because I was concerned about the Atlantic Coast Pipeline going through my property and the impacts the project would have on me, my family, and my community.

4. Friends of Nelson is a community non-profit organization standing in opposition to Dominion's Atlantic Coast Pipeline project in Nelson County. Friends of Nelson's mission is to protect property rights, property values, rural heritage, and the environment for all the citizens of Nelson County, Virginia through community organizing, disseminating information, and offering guidance.

5. I was first on the board of Friends of Nelson in the summer of 2014 and became the president in October 2014. I served as the president until April 2016, when I returned to serving as a board member until June 2018. During my time serving in various roles for Friends of Nelson, I was intensely involved in the organization's activities. I organized and spoke at rallies, wrote letters and emails on behalf of the organization, researched court records, conducted outreach to landowners, explained the FERC commenting process to folks, and coordinated our social media output. Additionally, I spoke with officials from our local government, the Virginia General Assembly, FERC, and Dominion. All of these organizational activities were a part of Friends of Nelson's efforts to stop the Atlantic Coast Pipeline.

6. I live and recreate near the Atlantic Coast Pipeline route, which was originally slated to run through my backyard and would have cut off our access to the river and swamp on our property. The pipeline's route will have a tremendous impact on me and my family. We often visit natural areas nearby for birding, searching for dragonflies, and identifying plants. One such place is the James River Wildlife Management Area, which the pipeline is planned to go through. Our experience going to this special place will be impacted as trees will be cut down, workers will be all over, and there will be a huge trench for the pipeline. We also recreate in the national forests nearby and I worry that the construction, traffic, and

long-term effects of the forest fragmentation on biodiversity will hamper our recreation there.

7. I am concerned about soil erosion, water contamination, traffic, and the preservation of the natural beauty of Nelson County. I worry that the steep slopes, heavy rain, and lack of adequate erosion controls will lead to ground and surface water contamination and mud slides. I am also concerned that the traffic congestion throughout the pipeline construction process will be terrible because there is only one highway in this part of Nelson County. Dominion and its contractors transporting pipeline materials will cause significant traffic delays. The natural beauty of Nelson County is the reason people move and recreate here, and it has provided us with a tourist industry; all of this is threatened by the construction of the Atlantic Coast Pipeline.

8. The first contacts I received from Dominion were requests to survey my property. I did not give them permission to survey. Dominion then made clear that surveyors would be coming regardless of what I said and that legal action would be taken if I did not give my permission. I have also had contact with Dominion when speaking to employees and lobbyists at open houses they held with the community. The employees acted like they were sympathetic to the concerns of landowners, paying lip service in person and in the press about working hard with landowners to meet their concerns. Employees were clearly

dismissive of the concerns of other community members, denigrating them as environmentalists. For instance, a Dominion representative referred to those non-land owning members of our community as "crazy treehuggers."

9. The first contact I received from FERC was a landowner's rights pamphlet, which was not helpful at all. It arrived after we had already done research on our own using online sources to figure out the commenting process and other ways we can fight back. I, and Friends of Nelson, communicated frequently with an environmental protection specialist at FERC. Additionally, FERC employees attended the Dominion open houses and public meetings. I feel that the responses I received from FERC employees were inadequate and dismissive, regardless of what we were saying or what information we provided. It feels like FERC only communicates in order to pacify and check a box, not to actually respond with meaningful action to community concerns.

10. We hired an eminent domain attorney to respond to Dominion's numerous requests to survey our property and to keep them away for as long as possible. This attorney helped us understand our rights as landowners. Friends of Nelson encouraged every landowner to gain legal advice by signing on with an eminent domain attorney and/or by accepting Appalachian Mountain Advocates offer to advise landowners. These attorneys, as well as Southern Environmental

Law Center, have been invaluable in our efforts to combat the pipeline and provided expert evidence and advice throughout the process.

11. My health was impacted from the mental stress of the pipeline going through my property. I found the prospect of them building the pipeline here truly terrifying. Even when the route was changed so that the pipeline would no longer be going through my property, it took me over a year to feel safe and less anxious. During the process, I was so stressed and concerned that I could not eat and ended up losing significant weight. Dominion ended up changing the route because the original would have required permission from Congress to cut through the Blue Ridge Parkway and the Appalachian Trail. The new route is a short drive from my house and would cross near Wintergreen Resort.

12. I feel that FERC needs to make significant changes to its pipeline policy to protect communities in light of the fact that pipelines are for profit. The only real consideration for approving a pipeline is whether someone agrees to buy gas off that pipeline. That one factor should not be enough to consider a pipeline beneficial to the public, and it should be balanced against a full accounting of economic, environmental, and cultural harm.

13. Another issue is that landowners only get paid for the square footage in the easement, but there is no compensation for the loss of value to the property as a whole, nor for the landowners' subjective loss. Landowners are forced to sign

easements to have a say in the agreement and avoid court – a signed easement doesn't mean they feel they have received adequate compensation, as FERC and pipeline companies insist. FERC should do something to track landowners' actual sentiments and take them into account during the approval process rather than rely on signed easements as a litmus test of landowner satisfaction. FERC should also quantify how high the percentage of unhappy landowners (preferably measured more accurately than by the percentage of eminent domain) has to be for it to be considered a harm to the community.

14. I understand that Friends of Nelson, Sierra Club, and Natural Resources Defense Council and other public interest organizations are filing joint comments in response to FERC's Notice of Inquiry regarding its Pipeline Certificate Policy Statement. I am providing this statement because I am concerned about the impact of FERC's pipeline policy on my family and community, as well families and communities like ours all across the country.

I declare under penalty of perjury that, to the best of my knowledge, the foregoing is true and correct.

Executed 7/24, 2018.

Joanna Salidis