Comment of the Harvard Electricity Law Initiative

The “public convenience and necessity” standard is at the heart of the Commission’s Policy Statement. This comment examines the history of the public convenience and necessity standard and explores the Commission’s application of it in certificate proceedings. It concludes that accounting for the economic risks and environmental harms of downstream and upstream greenhouse gas (GHG) emissions in a certificate proceeding is consistent with judicial precedent and Commission practice.

Since the Commission issued its Policy Statement in 1999, federal, state, and local governments have enacted numerous policies aimed at reducing GHG emissions. The Commission itself has recently recognized that it has a role to play in these efforts. In addition to their environmental effects, which are increasingly apparent, GHG emissions represent substantial economic risks due to the physical impacts of climate change and the preferences of governments and the private sector for zero-emission energy. Market regulators are therefore recognizing that GHG emissions are a substantial financial risk for

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1 The Harvard Electricity Law Initiative is an independent policy organization based at Harvard Law School’s Environmental & Energy Law Program. We produce legal analysis to inform public debate and promote practical approaches to solving the electricity sector’s legal challenges.
2 15 U.S.C. § 717f(e) (requiring the Commission to grant a certificate to any qualified applicant upon a finding that the proposed service “is or will be required by the present or future public convenience and necessity”).
4 *Mountain Valley Pipeline*, 163 FERC ¶ 61,197 at P 281 n. 771 (2018) (“We do not believe, as the dissent implies, that the Commission does not have a responsibility to consider climate change impacts.”).
companies, and investors are increasingly accounting for “climate risk.” These risks may shorten the useful life of natural gas infrastructure, resulting in stranded assets that might burden customers and certificate holders.  

In its Policy Statement, the Commission should explicitly acknowledge that the economic risks and environmental effects of GHG emissions are among the factors that the Commission will consider in certificate proceedings. The Policy Statement should recognize the costs associated with GHG emissions and state that evidence of those costs is relevant in a certificate proceeding. As discussed in this comment, weighing costs associated with upstream and downstream GHG emissions fits well within the scope of the public convenience and necessity standard. In addition, because the Commission has authority to account for GHG emissions in certificate proceedings, the Commission must include such emissions in its National Environmental Policy Act (NEPA) environmental assessments.

I. It is Appropriate and Within Its Legal Authority for the Commission to Consider GHG in Certificate Proceedings

A. Rooted in State Laws, the Public Convenience and Necessity Standard Allows for Consideration of Economic Risks and Externalities

The public convenience and necessity standard was a common element of state regulatory schemes prior to the enactment of the Natural Gas Act (NGA). By 1930, at least forty-three states required companies in certain industries to obtain certificates of public convenience and necessity (CPCN) from a state public utility commission prior to conducting business or expanding operations.  

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9 Ford P. Hall, Certificates of Convenience and Necessity, 28 Mich. L. Rev. 107 (1929–1930); A Re-Examination of Competition in Gas and Electric Utilities, 50 Yale L.J. 875, 883 (1941) (citing a 1939 Moody’s study for the proposition that at least 33 states required CPCNs).
Requiring CPCNs was a means of regulating competition in a given industry.10 A comprehensive study of state laws from the late nineteenth and early twentieth centuries concludes that “the essence of the CPCN 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.”11 The study finds four rationales for CPCN requirements rooted in public utility economics: 1) avoiding wasteful duplication of physical facilities; 2) preventing “ruinous competition” among regulated companies; 3) minimizing “cream skimming;”12 and 4) protecting utility investors.

According to the study, a final rationale for regulating entry into a given industry was to “protect the community against social costs sometimes described as externalities.”13 In assessing externalities under the public convenience and necessity standard, regulators historically focused on public safety14 and environmental damage.15 State courts sanctioned consideration of such factors, reading the broad and inclusive public convenience and necessity phrase to include impacts on the community.16 As one court explained, regulators

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10 See New State Ice. Co. v. Liebmann, 285 U.S. 262, 282 (1932) (J. Brandeis, concurring) (“The introduction in the United States of the certificate of public convenience and necessity marked the growing conviction that under certain circumstances free competition might be harmful to the community, and that, when it was so, absolute freedom to enter the business of one’s choice should be denied.”).
12 “Cream skimming” refers to the diversion of more profitable customers from the incumbent utility while declining to serve less profitable customers who may be left without service if the utility fails.
13 Origins of the CPCN, supra note 11, at 428.
15 Jones, supra note 11, at 511 (observing that “a frequently cited ‘external’ social cost was environmental damage” and noting that in the early twentieth century environmental concerns typically centered around damage associated with duplicative infrastructure, such as multiple sets of distribution lines that necessitated tearing up streets and crowding sidewalks and cityscapes).
16 See Wisconsin Telephone Co. v. Railroad Comm’n. of Wisconsin, L.R.A.1916E 748 (Wis. 1916) (“The words are not synonymous and the effect must be given to both. The word ‘convenience’ is much broader and more inclusive than the word ‘necessity.’ Most things that are necessities are also conveniences, but not all conveniences are necessities.”); Kansas Gas & Elec. Co. v. Pub. Serv. Comm’n., 251 P. 1097, 1099 (Kan. 1927) (“The discretionary power of the Commission to grant or withhold certificates of convenience to public utility companies is broader than its power to govern rates and services of such companies. . . the public convenience ought to be the commission’s primary concern, the interest of public utility companies already serving the territory secondary, and the desires and solicitations of the applicant a relatively minor consideration.”); Mulcahy v. Pub. Serv. Comm’n., 117 P.2d 298, 300 (Utah 1941) (“the “convenience’ and ‘necessity’ required to support an application for a certificate are those of the public, not those of individuals”); see also Ford P. Hall, Certificates of Convenience and Necessity, 28 Mich. L. Rev. 276, 277 n. 240 (1929–1930) (citing numerous state regulatory decisions).
evaluating a CPCN application should consider “the needs and welfare of the people of the territory or community affected . . . as a whole.”

Accounting for economic and environmental risks of GHG emissions in a certificate proceeding fits within the historic meaning of the public convenience and necessity standard. Guarding against stranded assets is consistent with the CPCN’s public utility rationales of avoiding duplicative infrastructure and promoting a rational investment climate. Evaluating economic risks of GHG emissions serves the ultimate regulatory goal of protecting consumers.

Factoring the environmental costs of GHG emissions into certification decisions appropriately “protects the community against social costs.” While early twentieth century regulators were strictly concerned about localized externalities, GHG emissions are within the scope of the public convenience and necessity standard because they are so closely tied to the proposed service. Just as vehicular accidents are an inevitable consequence of transportation service, GHG emissions are nearly inseparable from natural gas service, inherently tethered to its consumption. The inescapable connection between GHG emissions and natural gas service is therefore akin to regulators’ concerns about public safety in CPCN decisions for transportation service, which courts have consistently held is within the scope of the public convenience and necessity standard.

**B. The NGA’s Public Convenience and Necessity Standard “Connotes a Flexible Balancing Process” that Supports Consideration of the Economic Risks and Environmental Harms Associated with GHG Emissions**

In the NGA, as well as in several other early twentieth century and New-Deal Era statutes, Congress mimicked state public utility laws’ general requirement that businesses obtain permission from regulators before operating or expanding and copied the specific CPCN language. As the Commission understood in early NGA proceedings, the new statute’s public convenience and necessity standard was imbued with meaning by decades of state law.

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17 *Mulcahy*, 117 P.2d at 301.
18 *Supra* note 14.
20 See, e.g., *Kansas Pipeline & Gas Co. and North Dakota Consumers Gas Co.*, 2 FPC 29 (1939) (citing twelve state regulatory or court decisions on meaning of CPCN); *In the Matter of Michigan-Wisconsin Pipeline Co.*, 6 FPC 1 (1947) (citing six state court decisions on the meaning of CPCN). Supreme
Section 7 compels the Commission to apply the public convenience and necessity standard to the “proposed service, sale, operation, construction, extension, or acquisition.” The Commission considers the public convenience and necessity only after it has determined that the applicant is “qualified.” The plain text of the statute therefore requires the Commission to focus its evaluation under the public convenience and necessity standard on factors that are external to the already qualified applicant. The Policy Statement currently characterizes the Commission’s evaluation as “essentially an economic test” that “balances the evidence of public benefits to be achieved against the residual adverse effect” of a proposal. If a project passes the test, the Commission “completes the environmental analysis where other interests are considered.”

If the Commission maintains this two-part analysis in the Policy Statement, it should account for GHG emissions in both steps. GHG emission risks are closely tied to evidence about market demand and project viability that the Commission already weighs in its economic balancing test. GHG emission risks relate to policy changes, litigation, corporate reputation, physical changes due to climate, and technological improvements. In general, while “the ways in which markets could be affected by climate change are varied and complex, one of the major ways is through shifts in supply and demand for certain commodities, products, and services.” These risks associated with GHG emissions might reduce demand for natural gas, perhaps more rapidly than conventional forecasts project, leading to overbuilding and stranded costs that certificate holders might seek to recover from existing customers.

The Commission’s Notice of Inquiry (NOI) in this proceeding appropriately recognizes that the Commission has authority to “incorporate[] a proposed project’s environmental impacts into the balance of factors under the public convenience and necessity standard.” The D.C. Circuit recently summarized that the Commission “could deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment” because of its downstream GHG emissions. As explained below in section ii, accounting for the social

Court cases dating back to the late 19th century support the proposition that Congress’s “adoption of the wording of a statute from another legislative jurisdiction carries with it the previous judicial interpretations of the wording.” Caroleene Products Co. v. United States, 323 U.S. 18, 26 (1944). See also ICC v. Railway Labor Executives Ass’n., 315 U.S. 373, 377 (1942) public convenience and necessity standard in the Interstate Commerce Act demands that regulators consider “a much broader sphere than the immediate locality and population served,” citing Colorado v. United States, 271 U.S. 153 (1926) and Transit Commission v. United States, 284 U.S. 360 (1932)).

22 Id.
24 Id.
25 Climate-Related Financial Disclosures, supra note 7 at p. 5–6.
26 Id.
27 Supra note 8.
29 Sierra Club v. FERC, 867 F.3d 1357, 1373 (D.C. Cir. 2017).
costs of GHG emissions would be consistent with the Commission’s evolving views of the factors that are relevant under the public convenience and necessity standard.

i. The existing Policy Statement and Commission practice support consideration of economic risks associated with GHG emissions.

Several threads of the existing Policy Statement support the inclusion of GHG emission risks in the Commission’s economic balancing test. The Commission has explained that in “balancing the public benefits against potential adverse consequences,” its “goal is to give appropriate consideration . . . to the possibility of overbuilding [and] subsidization by existing customers.”30 These factors are relevant to the Commission’s determination of whether there is a need for the proposed project. The Policy Statement finds that “evidence necessary to establish the need for the project will usually include a market study”31 and that “contracts or precedent agreements . . . would [also] constitute significant evidence of demand for the project.”32

The Commission should build on this existing policy and explicitly acknowledge that economic risks associated with GHG emissions are relevant considerations in its analysis of need, particularly its assessment of the possibility of overbuilding. To mitigate these risks, the Commission should scrutinize natural gas demand forecasts and contracts that support a certificate application. Enhanced scrutiny would be consistent with historic practice. One of the Commission’s first certificate orders stated that “applicants who contend that public convenience and necessity require or will require the construction and operation of facilities for the transportation and sale of natural gas should show . . . that there exist in the territory proposed to be served customers who can reasonably be expected to use such natural-gas service.”33 This rudimentary statement evolved into detailed analyses of long-term market forecasts, including projections about various power generation technologies.34

The Commission has recently recognized that “projections regarding future demand often change and are influenced by a variety of factors, including economic growth, the cost of natural gas, environmental regulations, and legislative and regulatory decisions by the federal government and individual states.”35 When presented with studies demonstrating a risk of overbuilding, the Commission rejected such evidence and relied on precedent agreements to support its determination of need.36 The Commission has held that it does

31 Policy Statement at 61,748.
32 Id.
33 *Kansas Pipeline and Gas Co.*, 2 FPC at 45.
36 Id. (rejecting pipeline opponents’ evidence about market need because the applicant presented agreements for long-term service).
not have an obligation “to look behind precedent or service agreements to make judgments about the needs of individual shippers.”

The Commission should reevaluate this policy. As discussed in the next section, ample precedent supports the Commission’s authority to interrogate end use in certificate proceedings. The Commission historically wielded this authority to ration natural gas based on its view of how the commodity ought to be consumed. Here, the Commission should take the more modest step of evaluating the market fundamentals that underlie precedent agreements. Doing so does not revive the Commission’s policy of prioritizing certain uses over others. Rather, the policy would treat all uses identically and recognize that demand is generally threatened by climate risks.

GHG emission risks might also affect investment in the natural gas sector, potentially leading applicants to demand higher returns or threatening the financial viability of applicants and their customers. The Commission’s Policy Statement need not predict how investors, consumers, and financial markets will address climate risk. Rather, it should explicitly include GHG emissions risks as a factor in the “essentially [ ] economic test” that guides certificate decisions. This inclusion will invite parties in certificate proceedings to submit relevant evidence, providing the Commission with important information and filling a gap in its understanding of the natural gas market. Noticeably absent from the NOI’s brief summary of “changed circumstances” since the issuance of the 1999 Policy Statement is any discussion of the changed regulatory environment and evolving investment landscape that could undermine projections for continued growth. In addition to myriad environmental regulations that address GHG emissions, financial regulators and investors are increasingly concerned about risks of GHG emissions. The Commission’s Policy Statement should acknowledge this feature of the natural gas market.

For example, responding to a directive from G20 financial ministers, an international task force of financial market participants chaired by Michael Bloomberg developed a framework for climate-related financial disclosures. The group’s report summarizes that “[t]ransitioning to a lower-carbon economy may entail extensive policy, legal, technology, and market changes . . . [which] may pose varying levels of financial and reputational risk to organizations.” It urges companies to evaluate and disclose climate-related risks and

37 Id. at P 36.
38 Policy Statement at 61,746.
40 Supra note 7.
42 Task Force report, supra note 7, at 5.
opportunities. More than 275 companies, including financial firms responsible for $86 trillion in assets, have already endorsed the task force’s 2017 recommendations.43

European financial market participants reached similar conclusions, finding that “[t]oday’s financial disclosures remain too short-term,” and recommending that European Union regulators “upgrade Europe’s disclosure rules to make climate change risks and opportunities fully transparent.”44 The report also finds recent progress, observing that “more of Europe’s financial institutions have shifted assets from ‘grey’ to ‘green’, more of Europe’s financial authorities have shown how [environmental and social] factors can be incorporated into market rules, and more of Europe’s users of financial services have demanded new ways of delivering their sustainability requirements.”45

The long-term implications of climate-risk disclosures for the natural gas sector remain to be seen. However, investors are already expressing concern about methane leaks, and pipeline developers routinely acknowledge in public financial filings that “GHG regulations could have material adverse effects on business, financial positions, results of operations or cash flows.”46 The Policy Statement need not take any position on these developments but should simply acknowledge that evidence about the economic risks of GHG emissions is relevant in a certificate proceeding. This acknowledgement is particularly important and appropriate given the possibility that the Commission may not revisit its Policy Statement again for decades. Climate risk is likely to become a more prevalent concerns, and Commission should have a mechanism in place to address it.

Ultimately, accounting for economic risks associated with GHG emissions serves the NGA’s consumer protection purpose.47 The Supreme Court has explained that the NGA was “framed as to afford consumers a complete, permanent and effective bond of protection from excessive rates and charges.”48 The CPCN requirement is at the “heart” of the statute’s protective design.49 By accounting for the risks of GHG emissions, the Policy Statement will faithfully reflect the history and purpose of the CPCN requirement.

45 Id.
49 Id.
ii. The Commission’s consideration of end use and air pollution in certificate proceedings supports the inclusion of GHG emission risks.

Since Congress amended Section 7 in 1942, the Commission has endorsed the view held by state regulators and courts that evaluating CPCN applications includes an examination of the social costs and benefits associated with the proposed service. Commission certificate decisions have considered several factors, including “national defense, conservation of natural gas, air pollution, antitrust considerations,” and local land and environmental impacts. The specific factors that the Commission considers has evolved, reflecting changing regional and national priorities and in response to arguments raised in certificate proceedings. This section focuses on the Commission’s evaluation of the economic and environmental effects of natural gas consumption to demonstrate that consideration of environmental effects of GHG emissions and their broad impact on the economy is consistent with precedent.

Numerous certificate orders from the 1940s and 1950s discuss how the gas supplied by the proposed service will be consumed and whether gas should be conserved for higher value uses. The Commission’s evaluation of end use and conservation reflected societal concerns about overconsumption of an exhaustible resource and attendant economic consequences. Certificate decisions that discuss end use and conservation reveal how the Commission understood the scope of the public convenience and necessity standard. In one case the Commission explained that

[from the evidence in this record it appears that the displacement of coal to the extent here marked, would have an adverse effect on the coal and railroad industries. We do not say, however, that this alone would be determinative of the question of whether or not a certificate should issue in a proceeding where considerations of the broad public interest—the interest of all potential consumers, the public welfare or national defense—outweigh the adverse effect that natural gas service might have on competitive fuels. We are always to be guided by the concepts of ‘public convenience and necessity’ as enunciated by the courts and by this and other regulatory bodies.]

By 1944, the Commission considered it settled law that “considerations of conservation [of gas for high-value uses] are material to the issuance of certificates of public convenience

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50 The Commission was initially skeptical that the NGA allowed it to account for the “broad social and economic” effects of its CPCN decisions. *Kansas Pipeline & Gas Co*, 2 FPC at 57; Hearings on H.R. 5249 (Jul. 10–11, 1941) at p. 5 (testimony of FPC Commissioner Basil Manly that the Commission “concluded that if Congress had intended [the Commission] to weigh the social and economic interests of competitive fuels . . . it would have been given jurisdiction over all natural-gas pipelines.” Congress provided such authority in the 1942 amendment.)


and necessity.”\textsuperscript{54} To support its conclusion, the Commission cited the Supreme Court’s statement in the landmark \textit{FPC v. Hope} decision that “the Commission is required to take account of the ultimate use of the gas.”\textsuperscript{55} Implementing this non-discretionary duty, in a 1944 proceeding the Commission dismissed an application for a pipeline that would deliver gas for power generation, concluding that “it is necessary and appropriate in the public interest that such natural gas resources be conserved in so far as possible for domestic, commercial and superior industrial uses.”\textsuperscript{56}

Some Commissioners felt that the Commission was nonetheless giving insufficient weight to end use. Motivated by “the growing intensity of the conflict between opposing interests in certificate cases coming before us under section 7,”\textsuperscript{57} the Commission instituted an investigation that culminated in two reports transmitted to Congress. One report authored by two Commissioners recommended that the Commission “give increased consideration” to conservation in proceedings about proposed pipelines that would provide gas to coal-producing states.\textsuperscript{58} According to the report, the Commission should account for producing states’ “pressing interest” in conserving for their own industrial development.

Accounting for such societal costs, Commission policy in the 1950s was to generally disfavor pipelines proposed to transport gas for “inferior” uses.\textsuperscript{59} Numerous certificate decisions also acknowledge the “economic impact upon the coal industry, the railroads, and those employed in these industries” that compete with natural gas.\textsuperscript{60} Thus the Commission separately recognized that that its certificate orders have wide-ranging economic effects that are external to the applicant and do not directly affect consumers.

In 1959, the Commission reiterated that it must look beyond “conventional requirements of public convenience and necessity—matters of markets, facilities, gas supply, and to a substantial extent, rates.”\textsuperscript{61} In that case, the Commission determined that “policy considerations,” particularly the proposed use of the gas as boiler fuel, outweighed those conventional factors and rejected the proposed pipeline. On rehearing, the Commission

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  \item \textsuperscript{54} \textit{In the Matters of Hope Natural Gas, et al.}, 4 FPC 59 (1944).
  \item \textsuperscript{55} Id. (citing FPC v. Hope Natural Gas Co., 320 U.S. 591, 639 (1944)).
  \item \textsuperscript{56} \textit{Memphis Natural Gas Co.}, 4 FPC 608 (1944). On rehearing, the Commission reversed. \textit{Memphis Natural Gas Co.}, 4 FPC 197 (1944).
  \item \textsuperscript{57} \textit{Memphis Natural Gas Co.}, 4 FPC 197 (1944).
  \item \textsuperscript{58} Report of Commissioner Leland Olds and Claude L. Draper, Docket G-580 (Apr. 28, 1948).
  \item \textsuperscript{59} \textit{In the Matter of Mississippi River Fuel Corp.}, 12 FPC 109, 112 (1953) (“We have repeatedly held that the use of natural gas as boiler fuel is an inferior usage and that, while it is not to be denied in all situations, it should be permitted only on a positive showing that it is required by public convenience and necessity.”); H.T. Koplin, Conservation and Regulation: The Natural Gas Allocation Policy of the Federal Power Commission, 64 \textit{Yale L.J.} 840, 852 (1955) (citing numerous orders).
  \item \textsuperscript{60} Conservation and Regulation, \textit{supra} note 59, at 852 (citing \textit{Michigan-Wisconsin Pipeline Co.}, 6 FPC 1, 27 (1947); \textit{Re Natural Gas Pipeline Co.}, 5 FPC 85 (1946); \textit{Re Mississippi River Fuel Corp.}, 6 F.P.C. 280, 289 (1947)).
  \item \textsuperscript{61} \textit{Re Transcontinental Pipeline Corp.}, 21 FPC 138, 141 (1959), \textit{reh'g granted}, 21 FPC 399 (1959).
\end{itemize}
recognized that reductions in air pollution due to proposed natural gas service were relevant to its certificate determination. It elaborated that

\[\text{[t]he courts have long held that the 'public convenience and necessity' is not a phrase of fixed content to be mechanically applied regardless of the diversity of facts presented in particular cases. On the contrary, the statutory standard encompasses many considerations which in number and importance vary as the circumstances of the cases vary, subject to the existence of certain conventional minimum requirements which must be satisfied in every case.}\]

On appeal, the Supreme Court endorsed the Commission’s view and held that “the 'end-use' factor was properly of concern to the Commission.” The Court understood the public convenience and necessity standard to “connote[] a flexible balancing process” that requires the Commission to “evaluate all factors bearing on the public interest.” The Court also approved of the Commission’s decision to reject the pipeline despite arguments by proponents that the project would ameliorate air pollution. Importantly, the Court did not hold that consideration of downstream emissions was beyond the Commission’s Section 7 authority but instead deferred to the Commission’s factual findings about air pollution in that case.

With its legal authority bolstered by the Court’s decision, the Commission announced that, “like the general public, [it] is increasingly concerned about the environment.” Reflecting a national consensus about the need to mitigate air pollution, pipeline proponents submitted evidence that new service would improve air quality by displacing coal. The Commission asserted that “one of the most important factors in determining the extent and scope of the market for natural gas in any community is the contribution which additional gas might be able to make to alleviating air pollution” and rejected the argument that “combat[ting] air pollution is solely for local authorities.” Several certificate decisions from the 1960s and 1970s summarize technical analysis of downstream emissions and weigh those impacts.

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62 Re Transcontinental Pipeline Corp., 21 FPC 399 (1959) (“We recognize that the 'policy considerations' embodied in Public Law 159 [of 1955] and Executive Order No. 10779 [both about air pollution] are pertinent here.”).

63 Id.

64 FPC v. Transcontinental Pipeline Corp., 365 U.S. 1, 22 (1961); FPC v. Sunray DX Oil Co. (1968) (“The Commission has undertaken to ensure that gas is not devoted to wasteful end uses, and this Court has upheld its exercise of such authority.”).

65 Henry v. FPC, 513 F.2d 395, 403 (D.C. Cir. 1975) and Cascade Natural Gas Corp. v. FERC, 955 F.2d 1412, 1421 (10th Cir. 1992) state that the Commission is “required to” and “must” evaluate all factors bearing on the public interest.


68 Id at 185.

69 Id.; Re Florida Gas Transmission Co., 37 FPC 424 (1967); Re Transcontinental Gas Pipeline Corp., 38 FPC 906 (1967); Re Chauveau Pipeline Co., 44 FPC 174 (1970); Tennessee Gas Pipeline Co., 53
The subsequent enactment of NEPA and the Clean Air Act in 1969 and 1970 did not displace Commission authority to consider air pollution under Section 7. To the contrary, the D.C. Circuit held that although the Commission has no legal authority to enjoin monopolistic conduct under federal antitrust law, “it certainly has the right to consider a congressional expression of fundamental national policy [in antitrust laws] as bearing upon the question whether a particular certificate is required by the public convenience and necessity.” The same principle applies to air pollution. The Commission may not directly enforce or establish emission standards, but “it certainly has the right to consider [the] congressional expression of fundamental national policy” embedded in the Clean Air Act.

Moreover, there is no basis for distinguishing under Section 7 between air pollutants that have immediate local effects on human health and GHGs. It is unquestionable that GHG emissions are “air pollutants” that “endanger public health or welfare” under federal law. That the precise impacts of GHG emissions may be more difficult to project than other air pollution does not excuse the Commission from considering them. The Commission has long evaluated air pollution studies despite its understanding that it was “dealing with an issue . . . which does not lend itself to absolute proof and should not be thought of exclusively in economic terms.” The Supreme Court has instructed that “uncertainties as to the future . . . need [not] paralyze the Commission into inaction” in a CPCN proceeding.

C. The Scope of the Public Convenience and Necessity Standard Is Not Limited by NAACP v. FPC

Both the Federal Power Act (FPA) and NGA contain numerous references to the “public interest.” In NAACP v. FPC, the Supreme Court explained that that the statutes’ directives to weigh the “public interest” do not provide the Commission with “a broad license to promote the general public welfare.” Rather, the “content and meaning of the words ‘public interest’” are limited by the “purposes for which the Act were adopted.” The

PFC 1206 (1975); see also Pub. Serv. Comm’n of NY v FPC, 463 F.2d 824, 829 (D.C. Cir. 1972) (“The record demonstrates that the Commission gave careful consideration to the questions of air pollution and environmental impact . . .”).

70 City of Pittsburgh v. FPC, 237 F.2d 741, 754 (D.C. Cir. 1956); Northern Natural Gas v. FPC, 339 F.2d 953, 958 (D.C. Cir. 1968) (“Although the Commission is not bound by the dictates of the antitrust laws, it is clear that antitrust concepts are intimately involved in a determination of what action is in the public interest, and therefore the Commission is obliged to weigh antitrust policy.”).

71 Massachusetts v. EPA, 549 U.S. 497 (2007) (holding that GHG emissions are “air pollutants” under the Clean Air Act); Coalition for Responsible Regulation v. EPA, 684 F.3d 102 (D.C. Cir. 2012) (upholding EPA’s “endangerment finding”).


73 U.S. v. Detroit and Cleveland Nav. Co., 326 U.S. 236, 241 (1945); American Airlines v. Civil Aeronautics Bd., 192 F.2d 417, 421 (D.C. Cir. 1951) (regulators must “examine the relevant past and present and then [] exercise a rational judgment upon that data to ascertain the public convenience and necessity in the reasonably foreseeable future”).

74 See 16 U.S.C. §§ 824, 824a, 824b, 824c, 824d, 824i, 824j, 824j—1, 824o, 824p, 824t, 824v; 15 U.S.C. §§ 717, 717b, 717c—1, 717f, 717n, 717s, 717t—2.

Court concluded that Congress’s use of the words “public interest” in the FPA and NGA “is a charge [to the Commission] to promote the orderly production of plentiful supplies of electric energy and natural gas at just and reasonable rates.”

The Commission’s recent *Dominion Transmission* order misreads NAACP and suggests that it limits the Commission’s authority to consider GHG emissions under Section 7. But the public interest standard and public convenience and necessity standard are not synonymous. The Supreme Court’s statement in *Transcontinental Pipeline* that the Commission must “evaluate all factors bearing on the public interest” 76 in a certificate proceeding does not rewrite the statute.

Section 7 uniquely provides the Commission with authority to regulate exit and entry, a power that it does not wield over public utilities regulated under the FPA. Until 1978, the public convenience and necessity standard appeared nowhere else in the Gas or Power Acts.77 As discussed above, Congress included the public convenience and necessity standard deliberately to mirror regulatory schemes that had been in effect for decades.

It is a cardinal rule of statutory interpretation that courts must give effect to the words of the statute. The Supreme Court has explained that courts must “refrain from reading a phrase into the statute when Congress has left it out. Where Congress includes particular language in one section of a statute but omits it in another . . . it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion.”78

Section 7 includes both the public interest and public convenience and necessity standards in different sub-sections, and requires the Commission to apply them to different types of applications and actions. The Court has held that when, as here, there is “[n]othing [to] indicate[] that Congress, when it provided these two terms, intended that they be understood to be redundant, [the Court] assume[s] that Congress used two terms because it intended each term to have a particular, nonsuperfluous meaning.”79 Had Congress intended that the Commission evaluate certificate applications under the public interest standard “it presumably would have done so expressly as it did in the immediately preceding sub-section.80

As described above, courts and the Commission have given meaning to the public convenience and necessity standard. The *NAACP* decision does not eviscerate a century of

76 *Supra* note 66.
77 15 U.S.C. § 717y, enacted in 1978, “facilitate[s] voluntary conversion of facilities from the use of natural gas to the use of heavy petroleum fuel oil” and provides that “no transfer of contractual interests [involving the receipt of natural gas] . . . may take effect unless the Commission issues a certificate of public convenience and necessity for such transfer.”
80 *Russello*, 464 U.S. at 23 (“Had Congress intended to restrict § 1963(a)(1) to an interest in an enterprise, it presumably would have done so expressly as it did in the immediately following subsection (a)(2).
precedent. While both the public interest and public convenience and necessity standards must be understood in light of the “broad purposes” of the NGA, there is no reason to conclude that their scope is co-extensive.

Even if the NAACP decision does apply to the NGA’s public convenience and necessity standard, the Court’s holding would not preclude consideration of GHGs in Section 7 proceedings. At issue in NAACP was the denial of a petition requesting that the Commission regulate public utilities’ employment policies. The Commission concluded that there was no “nexus” between its regulation under the FPA and utilities’ employment practices. The Court agreed, surmising that “it could hardly be supposed that in directing the Federal Power Commission to be guided by the ‘public interest,’ Congress thereby instructed it to take original jurisdiction over the processing of charges of unfair labor practices on the part of its regulates.”

By contrast, as discussed above, the Commission has long recognized a “nexus” between air pollution (and other social costs) and Section 7 certifications. In accounting for air pollution, the Commission does not take “original jurisdiction” over emission standards or their enforcement. Rather, as the Commission has explained, air pollution is one factor it considers under the “broad public convenience and necessity requirement of the NGA . . . [that] as important as it is, cannot be considered in isolation.” Moreover, NAACP cannot possibly limit the Commission’s consideration of the economic risks of GHG emissions, which should be a factor in the economic balancing test that drives a certificate proceeding.

II. The Commission’s NEPA Analyses Must Account for Downstream and Upstream GHG Emissions

NEPA requires all federal agencies to examine the environmental impacts of any major proposed actions. An agency’s Environmental Impact Statement (EIS) must examine the direct and indirect effects of its proposed action. Under NEPA regulations, direct effects are “caused by the action and occur at the same time and place.” Indirect effects are “reasonably foreseeable” effects that are “later in time or farther removed in distance,”

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81 ICC v. Railway Labor Executives Ass’n., 315 U.S. 373, 376 (1942) (“[t]he phrase ‘public convenience and necessity’ no less than the phrase ‘public interest’ must be given a scope consistent with the broad purpose of the Transportation Act of 1920”); Re Transcontinental Gas Pipe Line Corp., 21 FPC at 400 (we must interpret the standard of ‘public convenience and necessity’ in the light of the facts of each case, giving it a scope consistent with the broad purpose of the organic statute and applying it in pursuance of the policies the Act is intended to serve’) (citation omitted).
82 NAACP, 425 U.S. at 664 (quoting Re NAAPC, 48 FPC 40, 44 (1972)).
83 Id. at 671.
84 Re Transwestern Pipeline Co. at 190.
86 40 C.F.R. § 1508.8.
87 Id.
including “growth inducing effects [of a proposed project] and other effects related to induced changes.” Issuance of a CPCN can be a major federal action requiring an EIS.

A. Downstream and Upstream GHG Emissions Are Reasonably Foreseeable Effects of Issuing a CPCN

Downstream GHG emissions are direct effects of the issuance of a CPCN. Natural gas infrastructure, particularly pipelines, are constructed to transport natural gas so that it can be consumed. GHG emissions are therefore an inevitable effect of natural gas delivery. Because natural gas is typically “delivered as it is consumed,” the environmental effects of the consumption occur at essentially the same time as the delivery. For some uses, such as power generation, GHG emissions may occur at nearly the same place as the delivery.

If the Commission does not find that GHG emissions are direct effects of the issuance of a CPCN, it must find that the GHG emissions are indirect effects. Numerous federal courts have held that downstream GHG emissions are an indirect effect of permitting new fossil fuel production. As one court summarized, “combustion emissions are an indirect effect of an agency’s decision to extract [ ] natural resources.” In Sierra Club v. FERC, the D.C. Circuit extended this logic to the Commission’s certificate orders, explaining that “it is not just reasonably foreseeable” that transported gas will be burned, “it is the project’s entire purpose.” Moreover, “[i]t is just as foreseeable, and FERC does not dispute, that burning natural gas will release into the atmosphere the sorts of carbon compounds that contribute to climate change.” This holding easily extends to other types of permitted natural gas infrastructure.

Uncertainty about the gas’s end use or the amount of gas that will be consumed does not alter the Commission’s obligation to account for these reasonably foreseeable emissions. As the D.C. Circuit explained shortly after Congress enacted NEPA, “[r]easonable forecasting and speculation is [ ] implicit in NEPA, and we must reject any attempt by

88 Id.
89 Only two to three percent of natural gas is used as feedstock and not burned. See Energy Information Administration, Tbls. 1.3 and 1.11, https://bit.ly/2JQfeSZ.
92 San Juan Citizens Alliance at p. 10.
93 Sierra Club v. FERC, 867 F.3d 1357, 1372 (DC Cir. 2017). Although beyond the scope of the decision, the panel’s logic would apply to certification of other types of natural gas infrastructure, such as compressor stations, that are constructed to increase the quantity of gas transported for consumption.
94 Id.
95 Mid States Coalition for Progress, 345 F. 3d at 549 (“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”).
agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as ‘crystal ball inquiry.’”96 The Commission “need not foresee the unforeseeable,”97 but it may not ignore the inevitable.

The D.C. Circuit’s recent decision in Sierra Club v. FERC does not limit “foreseeable” effects to emissions associated with the proposed pipeline’s precedent agreements and contracts for service.98 While such contracted uses are relevant to the NEPA analysis, the panel did not hold that the Commission must consider downstream emissions only where transported gas has a definitively identifiable short-term use. To the contrary, the panel understood that “emission estimates would be largely influenced by assumptions rather than direct parameters about the project,” [and that] some educated assumptions are inevitable in the NEPA process.”99

The Commission likewise has an obligation to consider upstream GHG emissions as an indirect effect. Permitting new natural gas infrastructure may induce an increase in natural gas production and emissions associated with production and gathering.100 NEPA regulations require agencies to consider growth-inducing impacts,101 and numerous courts have held that the induced growth effects of a project are reasonably foreseeable under NEPA.102 Naturally, growth-inducing impacts are based on projections and are uncertain, but that uncertainty does not excuse the Commission from providing estimates.103

If the Commission were to assume that new infrastructure does not induce growth in production, it would still be obligated to account for upstream emission. A recent law review article about NEPA explains that courts have rejected similar “status quo” arguments in other contexts.104 Under this precedent, upstream emissions associated with all gas transported through the certificated infrastructure are indirect effects because the

97 Id.
98 See Dominion Transmission, 163 FERC ¶ 61,128 at P 43 n.96 (suggesting the Commission understands the case to limit its requirement to consider downstream emissions).
99 Sierra Club, 867 F.3d at 1375 (internal citations omitted).
101 40 C.F.R. 1508.08(b).
102 See, e.g., City of Davis v. Coleman, 521 F.2d 661 (9th Cir. 1975); Sierra Club v. Marsh, 769 F.2d 868 (1st Cir. 1985); Davis v. Mineta, 302 F.3d 1104 (10th Cir. 2002); Mid States Coalition for Progress v. Surface Transportation Board, 345 F.3d 520 (8th Cir. 2003); Barnes v. Dept. of Transp., 655 F.3d 1124 (9th Cir. 2011); Northern Plains Council v. Surface Transportation Board, 668 F.3d 1067 (9th Cir. 2011).
103 Laguna Greenbelt, Inc. v. U.S. Dept of Transp., 42 F.3d 517, 526 (9th Cir. 1994) (finding that “weaknesses [in the growth-inducing impacts analysis] do not prevent us from concluding that the discussion of growth-inducing impacts in the EIS easily meets our ‘rule of reason’”).
104 Burger and Wentz, supra note 100, at 149–150 and 166 (citing S. Fork Band Council of W. Shoshone v. U.S. Dept. of Interion, 588 F.3d 718, 725 (9th Cir. 2009); Dine Citizens Against Ruining Our Env’t v. Office of Surface Mining, Reclamation & Enf’t, 82 F. Supp. 3d 1201 (D. Colo. 2015)).
infrastructure enables the production. The articles argues that “FERC . . . cannot have it both ways: the pipeline is either needed to transport additional quantities of natural gas to markets, in which case it will enable additional production and consumption of gas, or the project is unnecessary.”

The Commission “bears the primary responsibility to ensure that it complies with NEPA,” and it “unquestionably” has an “affirmative obligation” to “seek out” information relevant to its evaluation. As the discussion above about end use indicates, it would hardly be novel for the Commission to ask applicants how transported gas will be consumed. Regarding emissions from production and leakage from various uses, the U.S. EPA prepares estimates, providing a starting point for the analysis. With information on end use and leakage, the Commission could readily estimate gross upstream and downstream emissions. Estimating net emissions would require additional data or assumptions. The Commission’s assumptions need not be precise, nor does NEPA require the Commission to generate new studies to estimate indirect effects.

Providing estimates of gross and net GHG emissions serves NEPA’s “twin aims” of 1) requiring regulators to “consider every significant aspect of the environmental impact of the proposed action” and 2) ensuring that regulators “inform the public that it has indeed considered environmental concerns in its decision making process.” The statute is designed to “make government officials notice environmental considerations and take them into account.” That aim is particularly relevant today with regard to climate change.

105 Id. at 166.
107 See, e.g., State of Alaska v. Andrus, 580 F.2d 465, 473 (D.C. Cir. 1978) (adding that “[indeed, this is one of NEPA’s most important functions”); Skull Valley Band of Goshute Indians v. Davis, 728 F.Supp.2d 1287, 1298 (D. Utah 2010) (agency has an affirmative obligation to obtain information where the information is essential to evaluating the impacts of a project and the information is “readily obtainable.”); See also Order No. 407, Statement of General Policy and Amendments to Section 157.14(a), 44 FPC 47 (1970) (“we find that the information to be provided in the exhibits hereinafter ordered will assist us in complying with the provisions of [NEPA]”); 40 C.F.R. § 1502.22(a) (agencies must include information relevant to a reasonably foreseeable significant adverse impact if it is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant).
109 See, e.g., Vermont Pub. Interest Research Grp. v. U.S. Fish and Wildlife Serv., 247 F.Supp.2d 495, 519 (D. Vt. 2002) (FWS made a “reasonable decision” to use existing and imperfect data and rely on practice in other lakes);
That the effects of GHG emissions will be realized on a global scale and over a long-term time horizon does not excuse the Commission from considering them. To the contrary, in enacting NEPA Congress “clearly intended to focus concern on the big picture relative to environmental problems.” NEPA’s text expressly requires recognition of “the worldwide and long-range character of environmental problems,” and demands that regulators consider “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity.

Climate change due to GHG emissions is not the sort of “remote and highly speculative consequence[]” that is exempt from an agency’s NEPA review. While specific impacts of GHG emissions are uncertain, it is “extremely likely” that GHG emissions are the “dominant cause” of observed warming since the mid-twentieth century. Moreover, “primarily in response to human activities,” incidence of daily tidal flooding is accelerating in more than 25 Atlantic and Gulf Coast cities, heavy rainfall and heatwaves are increasing in frequency across the United States, and annual trends toward earlier spring melt and reduced snowpack are affecting domestic water resources. Ignoring the underlying cause of these profound environmental impacts is irreconcilable with NEPA’s twin aims, the statute’s broad purposes, and its instructions to federal agencies.

B. Public Citizen Does Not Exempt Downstream and Upstream GHG Emissions from NEPA Review

In Department of Transportation v. Public Citizen, the Supreme Court held that “where an agency has no ability to prevent a certain [environmental] effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant ‘cause’ of the effect” under NEPA. This holding does not free the Commission from its responsibility to account for downstream and upstream emissions. As discussed above, the Commission has statutory authority to consider upstream and downstream GHG emissions in its Section 7 certificate decisions. Its decisions are therefore a “legally relevant cause” of the environmental impacts.

At issue in Public Citizen was a NEPA analysis conducted by the Federal Motor Carrier Safety Administration (FMCSA). In anticipation of the President’s lifting of a moratorium on the operation of Mexican motor carriers in the United States, the FMCSA promulgated

112 Swain v. Brinegar, 517 F.2d 766, 775 (7th Cir. 1975).
113 42 U.S.C. § 4332(2)(F)).
114 Trout Unlimited v. Morton, 509 F.2d 1276, 1283 (9th Cir. 1974).
115 Fourth National Climate Assessment, supra note 5, at Executive Summary.
116 Id.
117 See 42 U.S.C. § 4331 (recognizing “man’s profound impact” on the environment and stating that it is the government’s “continuing responsibility” to act “as trustee of the environment for succeeding generations” and “achieve a balance between population and resource use which will permit high standards of living”); § 4332 (establishing agency requirements, including an obligation to “recognize the worldwide and long-range character of environmental problems”).
118 Public Citizen, 541 U.S. at 770.
safety standards that would govern Mexican vehicles entering the United States. The Court held that FMCSA was not required to account for those vehicles’ emissions in its NEPA analysis of those safety standards. According to the Court, those emissions were an effect of the President’s decision to lift the moratorium and not of the FMCSA’s safety standards. The Court summarized that the FMCSA had “has no ability to countermand the President's lifting of the moratorium or otherwise categorically to exclude Mexican motor carriers from operating within the United States.” The emissions were therefore not an effect of the FMCSA’s regulations.

Under Section 7, the Commission is not so powerless. Unlike the FMCSA, which had no authority to prevent qualified motor carriers from entering the United States, the Commission has discretion to approve or deny CPCN applications.\textsuperscript{119} The public convenience and necessity standard provides the Commission with authority to consider air pollution, including upstream and downstream GHG emissions. The Commission thus has an “ability” to prevent those effects. \textit{Public Citizen} does not stand for the proposition that the agency conducting the NEPA analysis must account for only those environmental effects that it regulates directly. Such an overly broad reading of \textit{Public Citizen} would free agencies from accounting for nearly all environmental effects of major federal actions.

In \textit{Sierra Club v. FERC},\textsuperscript{120} the D.C. Circuit agreed that \textit{Public Citizen} does not allow the Commission to exclude downstream GHG emissions. The panel summarized that the “touchstone” of \textit{Public Citizen} is that an “agency has no obligation to gather or consider environmental information if it has no statutory authority to act on that information.”\textsuperscript{121} The key question, according to the decision, is whether the Commission has authority to consider the indirect environmental effects of a pipeline, including downstream GHG emissions. Concluding that the public convenience and necessity standard provides FERC with authority to consider downstream emissions, the panel held that \textit{Public Citizen} “did not excuse FERC from considering these indirect effects.”\textsuperscript{122}

\textsuperscript{119} Oklahoma Natural Gas Co. v. FPC, 257 F.2d 634, 639 (D.C. Cir. 1958) (“The granting or denial of a certificate of public convenience and necessity is a matter peculiarly within the discretion of the Commission.”).

\textsuperscript{120} \textit{Sierra Club}, 867 F.3d at 1372.

\textsuperscript{121} Id.

\textsuperscript{122} Id. at 1373.
Conclusion

The Policy Statement should explicitly acknowledge that evidence about the economic risks and environmental effects of GHG emissions is among the factors that the Commission will consider in a certificate proceeding. Accounting for such evidence under the public convenience and necessity standard is supported by Commission practice and judicial precedent. In addition, the Commission’s NEPA analyses must include downstream and upstream GHG emissions.

Respectfully Submitted,

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