FERC’s Failure to Analyze Energy Market Forces: Risks to Ratepayers, Landowners and the Overall Economy

Executive Summary

The Federal Energy Regulatory Commission (FERC) is neglecting to analyze sweeping energy market changes that should inform its decisions on proposed new interstate gas pipelines. Although FERC has proposed revising its 21-year-old Certificate Policy Statement that guides how it assesses whether a new pipeline is necessary, more than two years have passed since the public comment period closed, and the commission has taken no action. It is making costly, bad decisions as a result, and is failing to fulfill its duty.

The stakes are high.

Poor decisions result in massive projects that impose unjustified costs on “captive” ratepaying utility customers, locking them into long-term dependence on gas when the rate of demand growth for gas is dropping, and energy alternatives are cleaner and less expensive.

FERC’s approval of a pipeline project means private developers gain eminent domain power to take land or easement rights from anyone whose property is in a pipeline’s path, even as the commission fails to analyze the need for such projects.

FERC relies on a false premise in assessing a proposed pipeline’s necessity—that the mere existence of business contracts for the gas means the public needs it.

This reliance is not justified. The oil and gas industry as a whole, as well as pipeline developers, have been missing the mark in adjusting to changes in the energy market. The problems facing the gas market today are rooted in an oversupply of gas coupled with shrinking demand due to energy efficiency and growing competition from renewables; the driving issue when FERC produced its 1999 guidance document was scarcity of gas.
Also, the profit-making interests of the parties to pipeline contracts are not the same as the interests of the public. In the market for domestic energy service, utility ratepayers may ultimately bear pipeline construction costs whether the gas is needed or not.

FERC exacerbates this over-reliance on contracts when it includes reliance on contracts for international gas export as justification for using eminent domain in the United States.

Three major gas pipeline projects—the Constitution, the Northeast Supply Enhancement Project, and the Atlantic Coast Pipeline—were scrapped in 2020 after FERC had approved them, due in large part to problems that a more efficient agency would have identified and analyzed earlier. More project failures may follow.

FERC must modernize its outmoded policy and ineffective practices to make responsible decisions, under today’s market conditions, regarding the certification of new gas pipelines.
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Introduction

Technology-driven changes in the oil and gas extraction business, shifting global energy geopolitics, a low-price environment, and growing legal and public opposition to new infrastructure have transformed the landscape for new pipeline development in recent years. Several pipeline developers have missed the mark regarding this changing landscape, pressing forward with projects ill-suited for today’s market. The Federal Energy Regulatory Commission (FERC) has approved applications for major new pipelines that were later rejected because of new drivers of market conditions.¹ A more effective policy framework is needed to assess proposals for new gas pipelines.

In adopting the Natural Gas Act in 1938, Congress chose to regulate interstate gas pipelines in a manner similar to utilities.² The statute declares that “the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest,” 15 U.S.C. 717 (a). The U.S. Supreme Court has stated that the purpose of the law is:

- To "protect consumers against exploitation at the hands of natural gas companies";³
- To encourage “the orderly production of plentiful supplies of… natural gas at reasonable prices”;⁴ and
- To address, as “subsidiary” purposes, additional public interest concerns that include "conservation, environmental, and antitrust" considerations.⁵

The tool that Congress chose to regulate interstate gas pipelines was the certificate of public convenience and necessity, which had long been used to regulate railroads and utilities.⁶ Under the Natural Gas Act, no interstate gas pipeline can be built unless FERC issues a “certificate of public convenience and necessity” for it.⁷ The statute states that FERC can approve a pipeline only if it is “required by the present...
or future public convenience and necessity.\textsuperscript{8}

The Federal Power Commission, which was the predecessor to FERC, interpreted the statutory term, “public convenience and necessity,” as:

“...a public need or benefit without which the public is inconvenienced to the extent of being handicapped in the pursuit of business or comfort or both, without which the public generally in the area involved is denied to its detriment that which is enjoyed by the public of other areas similarly situated.”\textsuperscript{9}

The definition centers on whether the project is necessary to ensure that the public can engage in activities related to business or comfort. This is the “necessity” calculation that FERC must make. The U.S. Supreme Court states that “the term ‘public convenience and necessity’ connotes a flexible balancing process, in the course of which all the factors are weighed prior to final determination.”\textsuperscript{10} While the term “public interest” is not included in this section of the statute, courts have interpreted the balancing process to include consideration of “all factors bearing on the public interest,”\textsuperscript{11} related to the “purposes for which the Act were adopted.”\textsuperscript{12}

FERC must take into consideration the changing conditions affecting that calculation:

- At the time the statute was passed, natural gas was considered a scarce resource. Early cases under the law discussed the need to carefully conserve and allocate natural gas resources.\textsuperscript{13} Also, energy alternatives to natural gas were limited.

- Today, the problem is the reverse—overproduction of gas has caused supply to exceed demand. This is driving down gas prices and wreaking havoc in the industry, which can hardly be deemed “orderly production” pursuant to the Natural Gas Act’s purposes.

\textsuperscript{8} 15 U.S.C. § 717f(e).
\textsuperscript{9} Kansas Pipe Line & Gas Co., 2 FPC 29, 56 (1939). This definition was provided just a year after the law’s enactment, and continues to be cited in interpreting the term. See: Natural Fuel Gas Supply Corporation, 172 FERC ¶ 61,039 (Commissioner Barnard L. McNamee. Concurrence, p. 23). July 16, 2020.
\textsuperscript{11} 365 U.S. at 8. Also see: Atlantic Refining Co. v. Public Serv. Comm’n, 360 U.S. 378, 391 (1959) (“Where the application, on its face or on presentation of evidence, signals the existence of a situation that probably would not be in the public interest, a permanent certificate should not be issued”).
\textsuperscript{12} NAACP v. Federal Power Comm’n, 425 U.S. at 669. The court ruled that the Natural Gas Act did not empower the commission to require regulated entities to ensure nondiscrimination in employment practices, although it could address discriminatory practices affecting the setting of just and reasonable rates. It acknowledged that “the Commission has authority to consider conservation, environmental, and antitrust questions.” 425 U.S. at 670, n. 6.
• Energy efficiency improvements, new initiatives in peak power demand management, and stronger competition from renewable energy have changed the calculation of necessity. When energy demand increases can be met in an economically competitive way without building new pipelines and burning more fossil fuel, the public is not “inconvenienced or handicapped in the pursuit of business or comfort.”

• The increased awareness of the environmental risk from transporting and burning fossil fuels and the availability of cleaner alternatives changes the public interest calculation with regard to considerations of conservation and the environment.

Added to these considerations is the need to avoid unnecessary encroachment on private property. Nine years after the Natural Gas Act was passed, it was amended to grant the private corporation holding a certificate of public convenience and necessity the power of eminent domain to take any land, or an easement on such land, that happens to be in the developer’s chosen pipeline pathway.\textsuperscript{14} The Natural Gas Act grants private corporations this power to allow gas pipeline projects to go forward despite any landowner’s objection—but only for a pipeline project that has received a certificate of public convenience and necessity.\textsuperscript{15} FERC acknowledges that in evaluating pipeline projects, it must consider the issue of “the unneeded exercise of eminent domain.”\textsuperscript{16} This matter has become the subject of intense public debate, especially given FERC’s lax approach to analyzing the important question of necessity.\textsuperscript{17}

The agency issued a Notice of Inquiry in 2018, inviting input from the public on the factors that it should consider when deciding whether to issue a certificate of public convenience and necessity.\textsuperscript{18} More than two years have passed since the agency closed the public comment period,\textsuperscript{19} and the existing policy is now 21 years old.\textsuperscript{20} Yet FERC never produced a response to the public comments, and its outdated policy and practices remain unchanged.

\textsuperscript{15} Ibid.
Reliance on the Judgment of Pipeline Developers Is Misplaced

Energy Market Changes Should Compel FERC to Scrutinize Pipeline Proposals More Vigorously

As a matter of practice, FERC does not conduct an independent financial or energy assessment of pipeline proposals to determine the current market conditions. The agency fails to scrutinize demand forecasts on which the rationale for a new pipeline is based. Instead, it assumes that a business decision to enter into a contract for pipeline gas is sufficient proof of public need.

FERC’s existing Statement of Policy on Certification of New Interstate Natural Gas Pipeline Facilities (“Certificate Policy Statement”), which has been in place since 1999, anticipates a thorough review of substantive market and financial considerations. It declares:

“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.”

Yet in assessing public convenience and necessity, FERC normally limits its scrutiny to a single factor—whether or not the project has contracts with potential future customers for the pipeline’s gas, known as “precedent contracts.” FERC discloses that “in practice, the Commission does not look ‘behind’ or ‘beyond’ precedent agreements when making a determination about the need for new projects or the needs of the individual shippers.”

Thus, FERC rests its decisions about necessity on the premise that once a company decides to make a capital investment in a pipeline project and signs up future customers for its gas, then a public need for the pipeline exists. The implicit assumption is that companies conduct a diligence process that meets investment standards, and that a decision to put private money at risk is the only necessary measure of public need.

Such reliance on the judgment of pipeline developers is misplaced. Technological,

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23 See Sierra Club v. FERC, 867 F.3d 1359, 1379 (D.C. Cir. 2017). A precedent contract is a pre-construction contract that declares a commitment to use a specific percentage of a pipeline’s capacity. The parties later replace it with a “firm transportation” service contract.
24 FERC. Notice of Inquiry, op. cit., p. 46.
25 See Mountain Valley Pipeline LLC, 163 FERC ¶ 61,197. June 15, 2018 (Order on Rehearing). Also see: PennEast Pipeline Company, LLC, 162 FERC ¶ 61,053. January 19, 2018, pp. 27-36. Also see: Atlantic Coast Pipeline, LLC, 164 FERC ¶ 61,100. August 10, 2018 (Order on Rehearing).
geopolitical, supply, demand and price changes have combined with legal and public policy activity to introduce a series of market drivers that have substantially increased the risk profile of U.S. pipeline producers.

The oil and gas industry is in a decline that pre-dates the COVID-19 pandemic. The leading companies of the oil and gas transport sector, like that of the oil and gas sector generally, have lagged in the Standard and Poor’s 500-stock index for most of the last decade (See Figure 1).

**Figure 1: Performance of Selected Energy Sector Transport and Pipeline Companies Compared to S&P 500 Index, October 2010 to November 30, 2020**

![Graph showing performance of selected energy sector transport and pipeline companies compared to the S&P 500 index from October 2010 to November 30, 2020.](image)

**Legend:** ENB: Enbridge; GSPC = S&P 500 Index; ET = Energy Transfer; EPD = Enterprise Product Partners; TC Energy = TC Energy; KMI = Kinder Morgan Inc.; WMB = Williams Corporation; MPLX = MPLX; OKE = ONEOK

Unlike the rest of the sector, some companies in the transport sector—spurred in large part by the fracking boom—posted performances that led the S&P 500 for a period during the last 10 years. Nevertheless, in 2020, the energy sector has continued to place last in the S&P 500, losing 41 percent against the market’s 10 percent increase for the year to date. The declining position of the sector generally creates a major financial consideration that FERC must take into account when implementing statutory mandates related to certification decisions on gas infrastructure.

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FERC’s Failure to Analyze Energy Market Forces:
Risks to Ratepayers, Landowners and the Economy

Risk Factors

• **Technology.** Technological changes in oil and gas drilling, such as fracking, have contributed substantially to the oversupplied market. As technological efficiency increased production, growth signals were sent to various parts of the economy.\(^{28}\) Pipeline companies and other transport sector interests concluded that new pipeline capacity would be needed to move the increased volumes down the economic chain and ultimately to domestic and international consumers.

• **Global Competition.** In March 2020, as the pandemic was growing, a price war broke out when Russian and Saudi Arabian negotiators were unable to come to terms on an oil production plan.\(^{29}\) The dispute captured headlines as oil prices dropped precipitously. That dispute, however, was part of a much larger trend in the global oil and gas markets over the decade.

A new paradigm has emerged—with Saudi Arabia, Russian national oil producers and the U.S. market-driven model dominating global oil and gas markets\(^{30}\)—which has yet to develop into a working model of cooperation. The lack of cooperation substantially contributed to worldwide global oversupply. Each of these leading countries (as well as smaller company and producer interests) has pursued its own market share considerations with limited regard for market imbalances.

Oil and gas interests in the United States, driven by fracking, have produced more volume than the domestic market can consume. This has caused U.S. companies to seek new markets internationally. The drive for exports has contributed to a corresponding drive for new pipeline capacity. An astute revised FERC policy would incorporate considerations of how such pipeline capacity is tied to global trade agreements, oil and gas production agreements, global price trends and market share competition.

• **Price.** Because the oversupply of natural gas drove down prices, it initially served as an economic driver that supported capital investment. Low gas prices stimulated the electricity sector to invest in new gas-fired power plants and the petrochemical sector to invest in new cracker capacity to

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\(^{29}\) CNN. Oil prices crash by most since 1991 as Saudi Arabia launches price war. March 9, 2020.

\(^{30}\) Yergin, *op. cit.*
produce more plastics. The growth in investment in natural gas plants in the United States was prolific, and cracker plant build-out is worldwide. But a complex set of factors has undermined the economic advantage of a low-price environment. New gas plant capacity buildout is now on the wane. New cracker capacity slowdowns and cancellations have been identified as an industry concern, although many are proceeding in the face of difficult market conditions.

- **U.S. Domestic Policy Considerations.** Pipeline plans in the United States are now a matter of public controversy. The controversies stem from a menu of concerns related to health and safety, property and tribal rights, market disruption and climate change. These considerations often find outlets for expression in administrative and judicial proceedings, corporate boards, community meetings and the media. The sum total of these legal and public opinion activities has altered traditional concepts of political and regulatory risk that served as marketplace norms in years past.

The current dynamic of oversupply is generated by the production of rapidly rising amounts of oil and gas, as well as oil and gas infrastructure being added to the market at a rate that exceeds demand. As capacity grows, the combined effect of economic and political activity determines whether it is absorbed at a rate sufficient to maintain the financial viability of the economic chain—drilling, transport, processing and sale. When the dynamic falters, the chain weakens and produces a long list of distressed assets—capped oil and gas wells, devalued reserves and underutilized infrastructure. With this comes a cascade of value destruction for investors, including falling stock values, debt defaults, distressed sales, and mergers and acquisitions. Much of the underutilized infrastructure, moreover, falls on the backs of utility rate-paying customers, as explained below.

In sum, when too much capacity chases too little demand, the investment landscape turns negative. The short-term problems are part of much longer-term trends in the oil and gas industry and the pipeline sector that have altered investment. These drivers of the market recast the supply-and-demand scenario, and the price and business calculus, with factors outside the control of the simple assumptions that FERC uses in reviewing applications.

FERC’s current approach to regulating pipelines is geared to regulating an industry that no longer exists.

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34 Based on data and information from the Federal Trade Commission’s International Competition Network (ICN), and the Independent Commodity Intelligence Services (ICIS).
Deferring to an Industry That Is Missing the Mark in the New Economic Scenario, FERC Approved Three Major Pipelines That Ended Up Cancelled in 2020

The oil and gas industry’s decision-making on new pipeline capacity has increasingly missed the mark in recent years. By following rather than analyzing the industry’s decisions, FERC has increasingly supported investments that are later deemed not viable due to market and regulatory conditions, as well as public concerns, that the commission’s current process inadequately examines.

- In December 2018, the U.S. Chamber of Commerce identified numerous instances in which developers of proposed fossil fuel infrastructure, including pipelines, were unsuccessful in their efforts due to public opposition and the changing regulatory and market landscape.35

- A recent IEEFA report concluded that five examples of project delays on natural gas power plants, along with citizen opposition to six more, have raised uncertainty about the practical ability of companies to build new natural gas capacity in a saturated market. 36

- Moody’s Investor Services released a report in October 2020 presenting nine examples in which companies misread environmental regulatory processes, community opposition, and market signals—and ultimately could not complete their projects. The report acknowledges the opportunities and tensions within the oil and gas transport sector as low gas prices and global demand are supporting pipeline and utility sector investments. Meanwhile, carbon emission issues, community opposition, utility investments choices, state and local political decision-making and the pace of renewable energy growth are generating headwinds likely to curtail growth. Moody’s concludes that new pipelines come with the highest risks. Adopting a wait-and-see view, it is reserving long-term credit rating judgment based on actual completion and operations of pipeline projects.37

FERC’s failure to fully analyze the necessity of pipeline projects represents a severe breach of its responsibilities to the public. As a result of this failure, project developers, government agencies, communities and advocacy organizations spend significant amounts of time on permitting and certification processes—only to discover their time has been completely wasted after projects fail due to lack of real-world market need or other fundamental flaws.

Three massive pipeline projects that had already obtained FERC approval were abandoned in 2020. The projects weren’t doomed by land rights or environmental

36 IEEFA. Risks Outweigh Rewards for PJM Natural Gas Project Investors, op.cit.
issues.\textsuperscript{38} Instead, a confluence of factors caused their demise. Energy efficiency gains, options to reduce peak demand, the improved competitiveness of renewable energy, and state and local policy initiatives trending away from fossil fuel dependency undermined the market rationale for these pipelines.

FERC’s simplistic analysis of these projects found “necessity” where the market did not.

In February 2020, four partners—The Williams Companies (Williams), Cabot Oil and Gas, Alta Gas, and Duke Energy—abandoned efforts to build the $1 billion Constitution pipeline. The project would have moved fracked gas from Pennsylvania to New York and New England. The decision was announced after Williams declared that its fourth quarter and full year 2019 modified earnings were lowered by a $354 million impairment of the Constitution Pipeline project, of which it had a 41 percent share.\textsuperscript{39} A spokesperson for the companies stated that while FERC had approved the project and they had received “positive” rulings in court,\textsuperscript{40} the economics associated with the project “have since changed in such a way that they no longer justify investment.”\textsuperscript{41}

When the Consolidated Edison Company of New York (Con Edison) temporarily stopped providing new gas service in one county,\textsuperscript{42} possibly in reaction to New York State’s denial of a Clean Water Act approval for the Constitution pipeline,\textsuperscript{43} the governor responded by boosting

\begin{quote}
FERC’s simplistic analysis of these projects has found “necessity” where the market has not.
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\textsuperscript{38} Global Energy Institute, \textit{op. cit.} Compare with IEEFA. IEEFA Response to the U.S. Chamber of Commerce Analysis of the “Keep it in the Ground” Movement. February 2019.
\textsuperscript{40} See \textit{New York State Dep’t of Envtl. Conservation v. FERC}, 884 F.3d 450 (2d Cir. 2018).
\textsuperscript{43} Con Edison stated in a letter to elected officials that it had declared a Westchester area temporary moratorium due to “inability to meet rising demand...without new natural gas interstate pipeline infrastructure” and that it had been concerned about this since New York’s denial of the Clean Water Act certification to the Constitution pipeline. Con Edison. Letter. April 5, 2019. Also see: Politico. Con Ed warns of NYC moratorium if controversial pipeline is rejected. April 12, 2019.
funding for alternative energy in the service area. Con Edison proposed a solution that combines energy efficiency, peak demand management and use of compressors to increase gas supply from existing pipelines. The plan is expected to be in place by November 2023.

A few months later, Williams’s proposed *Northeast Supply Expansion Project* to move gas from Pennsylvania to New York was scrapped. While New York had denied a Clean Water Act approval for the project, the project was ultimately halted by an in-depth analysis that FERC should have conducted. The state’s Public Service Commission (PSC) required the analysis as part of an enforcement action against the pipeline’s sole customer, a utility. The utility had instituted a moratorium on both new gas hookups and restorations of existing service after the denial of the Clean Water Act approval. The PSC asserted that this conduct was unlawful, and it demanded in an enforcement settlement that the utility conduct a long-term gas needs assessment with public participation. The resulting examination of demand and alternatives, which FERC completely failed to include in its environmental impact statement, led the utility in May 2020 to identify non-pipeline alternatives to the project.

Shortly after the demise of the NESE project, Dominion and Duke Energy scuttled the *Atlantic Coast Pipeline*, a multibillion-dollar, 600-mile gas project. The pipeline had been slated to move fossil gas from northern West Virginia to Virginia and North Carolina. The decision, announced in July 2020, was surprising since it came only 20 days after the companies had won a U.S. Supreme Court decision in a case challenging the pipeline. The companies’ action may have been influenced by the enactment in Virginia of HB 167. The statute requires any energy utility seeking to recover costs under a long-term contract for more than 250,000 daily dekatherms of gas to prove that it cannot meet its obligations without additional fuel resources.

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47 The New York State Public Service Law (PSL) § 65-a states that if a utility cannot provide increased service due to a gas shortage, the PSC can authorize it to stop offering such service, in a manner that avoids undue hardship. If adequate supply exists, however, utilities must provide residential service. PSL §31(1) and Transportation Corporations Law §12.
48 NYS PSC. Order Adopting and Approving Settlement, Proceeding on Motion of Commission to Investigate Denials of Service Requests by National Grid USA, et al., Case No. 19-G-0678 (November 26, 2019).
50 Associated Press. Developers cancel long-delayed, $8B Atlantic Coast Pipeline. July 5, 2020. The Atlantic Coast Pipeline had received a Clean Water Act § 401 Water Quality Certification, which was upheld upon judicial review. See Appalachian Voices v. State Water Control Bd., 912 F.3d 746 (4th Cir. 2019).
after scrutinizing both demand and alternatives. Some Virginia legislators had reported to FERC in July 2019 that information in Dominion Energy’s 2019 Integrated Resource Plan indicated that the demand for the proposed pipeline’s gas had been overstated and that ratepayers would bear the financial consequences. They had called for a new demand study. This does not mean that pipeline construction has stopped. FERC has continued to approve pipeline projects. Yet the cancellations of major projects are highly significant:

- A state public service commission forced a utility customer of the Williams Pipeline to re-evaluate not only its options for supplying gas but also the basis for its gas need projections. The requirement indicates a new determination at the state and local level to find ways to achieve in-depth review of the need for pipeline projects and the availability of more acceptable alternatives. Meanwhile, FERC has neglected to conduct such analyses.

- Virginia passed a law to protect electricity customers from paying for large new gas pipelines where the project is not necessary for reliability and is not the least-cost way to meet demand. The law indicates a new willingness among legislators to protect “captive” ratepayers from energy decisions that unjustifiably raise rates. The Virginia law essentially codifies the same type of needs-and-alternatives analysis that New York required (on a one-time basis) in its enforcement action related to the Williams NESE pipeline—and that FERC should have required from the outset.

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51 The statute was enacted in April, 2020. Virginia Acts of Assembly, 2020 Sess., Chap. 661 (amending and re-enacting § 56-249.6 of the Code of Virginia). It states, “In any proceeding for the recovery of fuel costs under this subdivision in which the costs a utility seeks to recover include costs incurred under a natural gas capacity contract for a term of more than 10 years that procures more than 250,000 dekatherms per day that has not previously been subject to a review under this subdivision, the Commission shall require the utility to prove by a preponderance of the evidence that the utility has (i) determined that the utility cannot meet its service obligations, giving due regard, in the Commission’s sole discretion, to reliability of service and the need to maintain reliable sources of supply, without an additional fuel resource; (ii) reasonably identified and determined the date and amount of the new fuel resource it needs; (iii) objectively studied available alternative fuel resource options, as verified by the Commission, including options other than a new natural gas capacity contract or contracts to meet the identified and determined need; and (iv) determined that the natural gas capacity contract or contracts are the lowest-cost available option, taking into consideration fixed and variable costs and a reasonable projection of utilization. Absent the Commission’s finding that the utility has proven by a preponderance of the evidence that the utility had complied with the requirements of clauses (i), (ii), (iii), and (iv), the Commission shall deny the utility’s recovery of such costs….” Code of Virginia, § 56-249.6(D)(2).


FERC Bases Its Assessment of a Proposed Pipeline’s Necessity on a Flawed Market Assumption That a Contract with the Developer Proves Need

FERC rests its certification decisions on the premise that a company’s decision to make a capital investment in a pipeline project and contract with future customers for its gas is a reliable measure of public need for the project. It is a false premise.

The interests of the parties to a precedent contract for domestic energy service differ significantly from the public interest. Members of the public who are ratepayers may ultimately be forced to guarantee the companies’ profit whether they really need the gas or not. As the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit Court of Appeals) stated:

“All of these pipelines, of course, are being built for a reason: To make a profit for their shareholders, and their shareholders’ shareholders.”

Precedent contracts may reasonably be assumed to satisfy the interests of the consenting parties, but that does not necessarily encompass other financial factors and broader public interest factors relevant under the statute.

FERC sets the rate that a pipeline can charge based on a “cost of service” approach. Under cost-of-service ratemaking, rates are designed based on a pipeline’s cost of providing service, plus a reasonable return on its investment. FERC states:

“Cost-of-service may be defined as the amount of revenue a regulated gas

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54 Sierra Club v. FERC, 867 F.3d at 1376.
55 FERC does not even conduct a more robust inquiry if the precedent contract is with the pipeline owner’s subsidiary. It discloses that it “has not distinguished between affiliate and non-affiliate precedent agreements in considering the need for a proposed project.” FERC, Notice of Inquiry, p. 47. See Appalachian Voices v. FERC, No. 17-1271, 2019 WL 847199, slip op. p. 1 (D.C. Cir., February 19, 2019), finding that FERC’s reliance on precedent agreements with corporate affiliates was not arbitrary or capricious. That practice is challenged in another case, Environmental Defense Fund, et al. v. FERC, D.C. Cir. Nos. 20-1-16 and 20-1017 (consolidated), pending in the D.C. Circuit Court of Appeals, regarding FERC’s approval of the now completed Spire STL gas pipeline from Illinois to Missouri. An amicus brief argues that a vertically integrated monopolist subject to cost-based rate regulation could inflate transfer prices. American Antitrust Institute. AAI Asks D.C. Circuit to Hold FERC to Higher Standards in Protecting Competition and Consumers from Regulatory Gaming. July 6, 2020.
pipeline company must collect from rates charged consumers to recover the cost of doing business. These costs include operating and maintenance expenses, depreciation expense, taxes and a reasonable return on the pipeline's investment. A cost-of-service is a measure of a pipeline's annual 'revenue requirement' that will provide a company the opportunity to operate profitably and attract capital for future growth.\textsuperscript{56}

The rate that a newly authorized pipeline can charge its customers is based on two factors:

- The pipeline's cost of doing business (the gas itself is delivered at cost rather than at a profit) and
- A rate of return on equity, calculated as a percentage of the rate base (roughly the value of the pipeline's assets) that FERC determines is "sufficient to ensure that pipeline investors are fairly compensated."\textsuperscript{57}

Thus, the rate of return on the rate base is the profit-making portion of the rate that the pipeline can charge its customers (utilities or other distributors).

The impacts of this rate-setting system and FERC's reliance on precedent contracts in approving pipeline applications are not effective incentives for pipeline developers or utilities to ensure that a pipeline project is necessary to meet energy needs or the broader public interest. Rather, it is an incentive to build gas transport infrastructure whether the public needs more fossil-fueled energy or not, because:

- The pipeline developer is allowed to receive a rate of return on its capital investment in the pipeline, pursuant to a recourse rate as set by FERC.\textsuperscript{58} The rate of actual gas consumption that occurs after the pipeline is built does not affect the pipeline developer's profits so long as the developer has long-term contracts in place that guarantee sufficient payments to cover the pipeline's return on investment.

- A utility holding a contract with a pipeline developer or with a shipper paying to use the pipeline usually will make capital investments related to local distribution of the gas directly to customers or combustion of the gas for electricity production.\textsuperscript{59} While a utility that distributes the gas typically

\textsuperscript{56} FERC. Cost-of-Service Rates Manual. June 1999, p. 6. Also see FERC. Cost-of-Service Rate Filings. Retrieved December 5, 2020. Regulated energy firms normally are entitled to earn revenue that recovers prudently incurred operating expenses plus a fair return on investment. Also see: Federal Regulation of the Pipeline Industry, op. cit., p. 51.

\textsuperscript{57} North Carolina Utils. Comm'n v. FERC, 42 F.3d 659, 661 (D.C. Cir. 1994). Also see: Sierra Club v. FERC, 867 F.3d at 1376. The Natural Gas Act states that gas rates "shall be just and reasonable." 15 U.S.C. \textsection 717c(a). FERC has the discretionary power to set such "just and reasonable rate." 15 U.S.C. \textsection 717c(e).

\textsuperscript{58} The recourse rate establishes a ceiling for the return on investment, to curb the company's bargaining power, as a monopoly.

\textsuperscript{59} FERC notes that many producers seek to transport their gas to the nearest pooling point on the pipeline system, to be sold to others serving downstream markets. It notes, "Therefore, an increasing number of projects are being designed to transport gas to appoint of distribution on
FERC’s Failure to Analyze Energy Market Forces:
Risks to Ratepayers, Landowners and the Economy

is selling it not for a profit, but rather “at cost,” the utility makes a profit through the rate of return on its own capital investment. The rate of return is set by a state public utilities commission and incorporated into the utility rates charged to its customers. So, again, the rate of actual gas consumption that occurs after the pipeline is built generally does not affect the utility’s profits.

Such a domestic interstate pipeline project, once fully permitted and built, typically carries little risk for the developer or the utility distributing the gas. All costs ultimately will be borne by the ratepaying customers who pay the utilities that receive the gas, who in turn pay the pipeline owner directly, or a shipper on the pipeline. An exception occurs when the risk is borne by shippers who contract with the pipeline developer but do not have contracts in place for selling the gas and do not succeed in marketing their capacity.

A pipeline owner’s profit can be extraordinarily high. FERC has discretionary authority to conduct a rate investigation to assess whether or not an interstate pipeline’s rates are “just and reasonable,” but these investigations are not required on a regular, periodic basis. Also, launching such an investigation is discretionary. In 2019, for example, FERC declined to open rate investigations for two pipeline owners, even though one utility (Wyoming Interstate) was earning a return on equity of 19.2 percent and another (Natural Gas Pipeline of America, LLC) was reporting 23.5 percent.

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the interstate pipeline grid, which may not correspond to a defined market or end use.” FERC. Notice of Inquiry, op. cit., p. 21.

As one report explains, “A utility’s rate base is essentially the company’s ‘prudent’ capital investment, as determined by the applicable regulatory authority(ies), net of accumulated depreciation. Stated differently, it is the net asset base from which the utility provides ... service, and upon which the utility is allowed to earn a rate of return, usually the company's weighted average cost of capital.” S&P Global, Regulatory Research Associates. Rate Base: Shining a Light on a Subject That Continues to Fuel Discussion. February 23, 2017, p. 1.

FERC has discretion to require a pipeline company to provide a report on costs and revenues to justify its rates. 15 USC §717i(a).

While FERC argued that these high rates were the result of settlement orders, FERC Commissioner Richard Glick, in a dissent, disclosed that the settlement orders specifically retained FERC’s right to revisit the rates to determine whether or not they remained “just and reasonable.” Wyoming Interstate Co., 169 FERC ¶ 61,052 (October 17, 2019) (Commissioner Richard Glick, Dissent). FERC typically requires a new pipeline to file a cost and revenue study at the end of its first three years of operation to justify its cost-based rates. See, e.g., Mountain Valley Pipeline, LLC, 161 FERC ¶ 61,043 (October 13, 2017), p. 35. It may also do so in response to a change in law, such as its 2018 request to 129 interstate gas pipelines with cost-based stated rates to address the reductions in corporate income tax under the Tax Cuts and Jobs Act, Pub. L. 115-97, 131 Stat. 2054 (2017). See: FERC. Final Rule, 167 FERC ¶ 61,051. April 18, 2019, p. 4. Such disclosure mandates do not necessarily result in a rate investigation. In the instance of the 129 requests for reports, FERC instituted six rate investigations. Ibid.
FERC Exacerbates Its Over-Reliance on Precedent Contracts When It Includes—Yet Fails to Analyze—Export Precedent Contracts

Instead of curbing its reliance on precedent contracts, FERC has taken things to an extreme. FERC recently asserted that it can use its discretionary authority to base its determination of “necessity” for a pipeline on the existence of precedent contracts to sell gas to international export markets for private profit. Thus, international export precedent contracts can be used to justify domestic eminent domain.

The construction of infrastructure for export is on the rise, but both the “necessity” for this export and the impact on U.S. public interests deserve strong scrutiny. As David Bookbinder, chief counsel for the Niskanen Center, testified to Congress, “more and more pipelines are being built not to benefit U.S. consumers, but rather to benefit companies shipping LNG [“Liquified Natural Gas”] overseas.”63 While his testimony critiqued the constitutionality of FERC’s practices related to eminent domain, his point is also relevant to FERC’s willingness to base pipeline approvals on the mere existence of export contracts.

In the case of the Jordan Cove/Pacific Connector Pipeline, FERC granted a certificate of public convenience and necessity to the pipeline based solely on a precedent contract with the Jordan Cove Energy Project, an LNG export terminal project, for 96 percent of the pipeline’s capacity. The projects were so closely tied that FERC actually approved both in the same order.64 The pipeline developer, Pacific Connector Gas Pipeline, L.P., and the LNG terminal developer, Jordan Cove Energy Project L.P., are both wholly owned subsidiaries of Jordan Cove LNG L.P., which in turn is an indirect, wholly-owned subsidiary of Pembina Pipeline Corporation, a

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64 Jordan Cove Energy Project and Pacific Connector Gas Pipeline, 170 FERC ¶ 61,202 (March 19, 2020). FERC had previously rejected both projects because the pipeline developer had not conducted an open season for its capacity and had not submitted any precedent contracts, and the LNG facility would have no gas supply without the pipeline. See Jordan Cove Energy Project, L.P., 154 FERC ¶ 61,190 (March 11, 2016). The developer must meet the burden to prove necessity for a proposed pipeline, under NGA § 7, 15 U.S.C. § 717f(e), but FERC cannot deny certification to an LNG import or export facility under NGA § 3 unless it affirmatively demonstrates that the facility is inconsistent with the public interest. 15 U.S.C. §717b(a). The Department of Energy retains the power to decide whether exports to non-free-trade countries are in the public interest but delegates the power to approve or deny certificates for specific facilities to FERC. See U.S. Department of Energy. DOE Delegation Order No. 00-004.00A. May 16, 2006. See also 42 U.S.C. § 7172(e).
Canadian company. While FERC based its finding of public convenience and necessity on the contract with the pipeline developer’s sister LNG company, it dismissed arguments that the LNG project itself had failed to obtain customer contracts. Bookbinder, who represents landowners in the case, explains, “the gas literally has no place to go.”

For the proposed 250-mile-long NEXUS gas pipeline from Ohio to Michigan, two precedent contracts for export to Canada were signed by Canadian companies serving Canadian customers. They accounted for 29 percent of the pipeline’s subscribed capacity. Yet FERC approved a certificate of public convenience and necessity for the project, which authorized the developer to exercise eminent domain over private U.S. landowners in its pipeline’s path. The City of Oberlin appealed. The D.C. Circuit Court of Appeals remanded the case back to FERC for further consideration, requiring the agency to produce a written rationale for its reliance on export precedent contracts. Eminent domain expert Alexandra Klass notes that this decision, together with a case that ultimately succeeded in challenging FERC’s practice of delaying action on eminent domain appeals, was “the first indication that the D.C. Circuit is questioning whether FERC has gone too far in facilitating the expansion of the U.S. natural gas pipeline network regardless of the impact on private property rights.”

In response to the court’s ruling, FERC declared in a new written order that while the pipeline in this case also had domestic precedent contracts, the agency deemed export precedent contracts appropriate grounds for issuing a certificate of public convenience and necessity. It stated:

“[T]he fact that a precedent agreement may be with a foreign shipper for ultimate delivery to foreign customers does not diminish the probative value of such agreements in supporting a finding of public convenience and necessity.”

As the basis for its new written order, FERC argued that Congress views promoting export of energy to be in the public interest, in a general sense.

Yet FERC ignored the question of whether these particular export contracts met the test of “public convenience and necessity.” It provided no analysis of Canadian market issues related to gas export for the purpose of that case. FERC Commissioner

68 City of Oberlin v. FERC, 937 F.3d 599, 599 (D.C. Cir. 2019).
70 NEXUS Gas Transmission, LLC, 172 FERC ¶61,199 (September 3, 2020) (Order on Remand), p. 5.
71 Ibid.
Richard Glick objected to the lack of inquiry in a dissent:

“If the benefit of new pipeline capacity is that it will provide new pipeline capacity, then the Commission's assessment of need is little more than a circular 'check-the-box' exercise. Instead, if the Commission is going to consider the value of excess capacity as a benefit that justifies the need for a project, then common sense and reasoned decision-making require that the Commission at least attempt to assess whether there will at some point be a demand for that capacity. At no point in this proceeding has the Commission undertaken such an assessment.”

Moreover, FERC's broad pronouncement on export went far beyond the facts of the case before it. The agency essentially proclaimed that all gas export contracts meet the requirement of “public convenience and necessity” for the benefit of the U.S. public. This position ignores the potential impacts of exports on domestic gas markets, as well as the crucial differences among potential trading partners. An export precedent contract aimed at a market in Canada may be very different from one aimed at a market in Europe, Asia or elsewhere.

A proper review of a project involving international export would examine how long-term export commitments could affect U.S. consumers. Such a review would likely find that many gas export precedent contracts are neither necessary nor in the interests of the U.S. public.

### Assertions About Current Demand for Gas Exports Require Scrutiny

Assertions about the level and stability of demand in specific international markets must be scrutinized vigorously. An IEEFA report found that that gas importers in China were losing money on LNG imports even before the COVID-19 crisis. More broadly, the analysis reported that global gas markets face a trio of conditions likely to undermine the stable execution of international contracts:

- Collapsing prices,

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72 Ibid., Dissent of Commissioner Richard Glick, pp. 4-5. The Oberlin plaintiffs petitioned for rehearing of the FERC Order on Remand, but FERC denied it on November 3, 2020.

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- Falling consumption, and
- A sustained glut that could persist for much of the coming decade.74

IEEFA subsequently identified similar economic problems with LNG export plans in British Columbia.75 The depressed international LNG market led to scores of cancelled LNG cargoes from U.S. export facilities, leaving the majority of the nation’s liquefaction capacity unused for most of the summer of 2020.76 Indeed, construction of new U.S. LNG terminals has generally stalled, in large part due to lack of international demand.77

Despite substantial market issues indicating that further additions to U.S. LNG exports are not “necessary” for the public or in the public interest, FERC has approved 15 LNG facilities not yet under construction.78 Using contracts from LNG facilities to justify new pipeline construction, without analysis, is not reasoned decision-making under today’s market conditions.

**Assertions of Long-Term Demand for Gas Export Require Even More Scrutiny**

FERC should consider the potential impact of international policy changes to reduce long-term demand for U.S. gas exports.

- The European Commission’s recently issued strategy to reduce methane emissions states that the commission “will examine options as regards possible methane emission reduction targets or standards or other incentives on fossil energy consumed and imported in the EU.”79 The commission “intends to mobilise a coalition of key import countries to coordinate efforts on energy sector methane emissions.”80

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76 See U.S. Energy Information Administration. *U.S. liquefied natural gas exports remain at low levels this summer*. August 11, 2020. While recognizing that the COVID-19 pandemic is playing a role in this situation, the report states that, “High natural gas storage inventories in Europe and Asia and an ongoing expansion of global LNG liquefaction capacity have also contributed to international natural gas and LNG prices reaching all-time historical lows.”
79 European Commission. *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on an EU strategy to reduce methane emissions*. October 14, 2020, pp. 2 and 10.
80 IEEFA. *No Upside: The U.S. LNG Buildout Faces Price Resistance from China*, *supra*, p. 16. The European Union includes Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden.
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- Engie SA, for example, withdrew from negotiations for a potential 20-year supply contract with a U.S. LNG developer in November 2020, after the French government warned that the agreement conflicted with its climate change goals.81

- Other policy concerns may pose risks of similar long-term disruptive impacts on U.S. exports. Well before the COVID-19 pandemic, the Center for Strategic and International Studies described the complexities of international gas import and export markets and also noted the potential impact of trade treaty negotiations on gas exports.82

The Need To Examine the Potential Impact of Increased Exports on Domestic Gas Prices

FERC should analyze how increasing gas exports to volatile international markets could affect gas prices for U.S. consumers. A recent IEEFA report on risks to U.S. domestic gas projects found that U.S. exports of LNG surged more than 68-fold during the past four years. It warned that the volatility in international gas markets will boost price volatility in domestic gas markets.83 Given the instability of international gas demand and the potential effects of gas exports on domestic prices, FERC’s failure to analyze international export precedent contracts is even more unreasonable and egregious than its failure to analyze U.S.-based precedent contracts.

FERC’s Failure to Analyze Necessity Contradicts Its Mission and Its Duties

FERC’s Strategic Plan states that it demonstrates “the Commission’s responsiveness to changes in stakeholder needs and the energy landscape."84 It declares that FERC’s primary mission is to “[a]ssist consumers in obtaining economically efficient, safe, reliable and secure energy at a reasonable cost through appropriate regulatory and market means, and collaborative efforts.”85 The agency cannot respond to

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83 IEEFA. Risks Outweigh Rewards for Investors Considering PJM Natural Gas Projects, supra, pp. 27-34. Also see: Commodity Futures Trading Commission. Liquefied Natural Gas Developments and Market Impacts. May 2018, p. 15 (“Given the magnitude of U.S. exports, there is also the potential that domestic natural gas markets could become subject to global supply-demand dynamics with the potential for increased volatility”).
85 Ibid., p. vii. FERC declares that under its mission, it should take action "to ensure adequate compensation for resources responding to system needs, to remove barriers to ensure access to the market and grid by all resources, and to ensure that consumers have reasonable access to the services they need." Ibid, p. 2.
changes in needs and the energy landscape, however, unless it analyzes them when making major decisions.

In addition to its responsibilities under the Natural Gas Act, FERC has a duty to evaluate pipeline applications when they trigger environmental review under the National Environmental Policy Act (NEPA).86 The process provides an important and useful framework for assessing the need for a pipeline project in the context of the changing energy landscape, as well as the existence of alternative approaches for addressing the need identified. Yet FERC has ignored this duty, just as it has ignored its own Certificate Policy Statement.87

NEPA requires FERC to take a “hard look” at the proposed action’s environmental consequences and at potential alternatives to reduce them.88 Where a project may have a significant environmental effect, FERC must prepare an environmental impact statement (EIS) that evaluates the need for the project.89 It also must evaluate reasonable alternatives to the proposed action to reduce adverse environmental impacts and explain why any such alternatives are rejected.90 An EIS is deficient and the agency action it supports is arbitrary and capricious if the EIS fails to provide sufficient discussion of the relevant issues, or fails to demonstrate “reasoned decisionmaking.”91

In FERC’s 2019 review of the Williams Northeast Supply Enhancement (NESE) pipeline from Pennsylvania to New York, the agency dismissed all suggestions of demand reduction measures or renewable energy alternatives to the pipeline project. The agency asserted that it was not required to conduct such analysis “because the purpose of the Project is to transport natural gas to meet National Grid’s needs, and renewable energy sources or reductions in demand are not transportation alternatives.”92 Of course, transportation projects such as highways are required to demonstrate a need for the project and consider the full range of alternatives, such as more efficient use of existing roads, as well as feasible mass transit options.93

FERC’s refusal to consider demand reduction strategies also flies in the face of a national imperative expressed in the Energy Independence and Security Act of 2007. The federal law requires FERC to conduct a national assessment of demand

87 FERC recognizes that it has the authority to “incorporate a proposed project’s environmental impacts into the balance of factors under the public convenience and necessity standard.” FERC. Notice of Inquiry, op. cit., p. 58.
89 40 C.F.R. §1501.3. NEPA regulations require consideration of the “no action” alternative. 40 C.F.R. § 1502.14 (c).
90 40 C.F.R. §§ 1502.14(a) and 1502.16(a)(1).
91 Natural Resources Defense Council v. Hodel, 865 F.2d 288, 294 (D.C. Cir. 1988). Also see Delaware Riverkeeper Network v. FERC, 753 F.3d 1304, 1313 (D.C. Gr. 2014) and Sierra Club v. FERC, 867 F.3d at 1368.
response potential, develop a national action plan on demand response and produce a proposal with the Department of Energy to implement the plan.\textsuperscript{94} It is clearly federal policy to encourage demand response.

Consideration of demand reduction, energy efficiency and other strategies as alternatives is consistent with the Natural Gas Act. While the D.C. Circuit Court of Appeals has found that the existing Certificate Policy Statement and case law do not explicitly require FERC to look beyond precedent contracts in assessing any project’s benefits, it indicates that such inquiry is a matter of agency discretion. It stated, “Petitioners identify 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.”\textsuperscript{95} FERC’s Certificate Policy Statement acknowledges that while precedent contracts “always will be important evidence of demand for a project,”\textsuperscript{96} the agency will consider “all relevant factors reflecting on the need for the project.”\textsuperscript{97} That language should be strengthened, given the inadequacy of relying on precedent contracts alone.\textsuperscript{98}

By pursuing its anemic approach to evaluating necessity, FERC sidesteps its duties under federal environmental policy, as well as the public interest mandate in its statutory mission. These statutory mandates are in place to improve the quality of decision-making and to protect landowners, ratepaying consumers and the general public. Failing to heed them is a serious shortcoming in FERC’s process. The result is that FERC approves ill-considered projects and—not surprisingly—some of them fail in a dramatic way.

\textsuperscript{94} 16 U.S.C. §2621(d)(5), (d)(6) and (d)(8). Similarly, the Energy Policy Act of 2005, § 1252(e)(3) required FERC to prepare a report on electric demand response resources.

\textsuperscript{95} Myersville Citizens for a Rural Community, Inc. v. FERC, 783 F.3d 1301, 1311 (D.C. Cir. 2015) (citing Minisink Residents for Envtl. Preservation v. FERC, 762 F.3d 97, 111, n. 10 (D.C. Cir. 2014). Also see Sierra Club v. FERC, 867 F.3d at 1379.


\textsuperscript{97} Ibid., p. 23.

\textsuperscript{98} Considering factors related to the end use of a pipeline is also well within FERC’s power. FERC denied one pipeline application because it deemed the end use to be an “economic waste” of natural gas, which at that time was considered a scarce resource. The U.S. Supreme Court ruled that, “consistent with the congressional purpose of leaving no ‘attractive gap’ in regulation, we must conclude that the ‘end-use’ factor was properly of concern to the Commission.” Federal Power Comm’n v. Transcontinental Gas Corp., 365 U.S. at 22.
FERC’s Failure to Curb Overbuilding of Pipeline Capacity Causes Adverse Economic Impacts and Impairs Property Rights

FERC is in a unique position to help guide wise energy infrastructure development. By ignoring the shifting sands in the energy market and allowing corporate decision-making to serve as its measure of necessity, however, FERC facilitates overbuilding of pipeline infrastructure.\(^9\) Both a congressional subcommittee’s preliminary findings report and a nonprofit organization’s analysis found that in the past 20 years, FERC approved more than 99 percent of project applications.\(^{10}\) The chart below compares existing pipeline approvals (by pipeline length), by year, with the total that will occur if all current pipeline applications are approved.\(^{11}\)

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\(^9\) To “overbuild” an energy project means to “build capacity for which there is not a demonstrated market need.” FERC. Certificate Policy Statement, clarified. 90 FERC ¶ 61,128, op. cit., p. 4.


\(^{11}\) FERC. Approved Major Pipeline Projects (2015-Present). Retrieved December 7, 2020. Also see: FERC. Major Pipeline Projects Pending. Retrieved December 7, 2020. FERC reports that the data is current as of August 30, 2020. FERC states that the data “does not include abandonments, minor projects that do not include any facilities, projects under the blanket program, storage projects or LNG projects.” \textit{Ibid.}
The agency has stayed the course with this approach, even in the face of growing criticism that it has fostered overbuilding of gas infrastructure. The overbuilding of gas pipelines is economically harmful to customers of utilities, affected landowners and the overall economy.

**Adverse Impacts to Captive Customers of Domestic Gas or Gas-Fired Electricity**

The costs of building gas pipelines to service U.S. domestic energy needs ultimately are expected to be borne by the residential, commercial and industrial customers of utilities. Their utility rate payments provide the revenue that not only supports the return on investment for the utility but also the rate that the utility pays for the gas. The rate that the utility pays for the gas—whether provided directly to the pipeline developer or to a shipper who is paying to use the pipeline—is normally set at a level that accommodates a return on investment for the pipeline developer. The utility ratepayers at the consumer end of this chain typically are “captive” customers who must pay the set rate.

A pipeline that is underused or dormant is a waste of ratepayers’ money. As explained above, once the pipeline is built, a low rate of actual gas consumption generally does not dampen the pipeline developer’s profits if a long-term contract with a utility is in place. The utility’s customers have been locked into making payments to cover the investment costs of the pipeline infrastructure, at a profitable rate of return for both the pipeline developer and the receiving utility, regardless of the amount of gas consumed.

Finally, the public, more broadly, will bear the pollution and climate-related costs of the increased burning of fossil gas that the pipeline facilitates.

**Adverse Impacts to Landowners**

Pipeline companies seek to turn high risks into high profits. But for most landowners in the path of a pipeline, their land is their greatest asset. A landowner facing a pipeline company’s FERC-delegated power to exercise eminent domain is adversely affected in several ways.

- **Forced negotiation.** A landowner threatened by eminent domain must undergo a “negotiation” process, knowing that failure to reach agreement means facing the pipeline company in court. Although the landowner supposedly is entitled to

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102 The Analysis Group found that FERC had approved more than 180 billion cubic feet a day (bcf/d) of new gas pipeline capacity since 1999, even though the average daily consumption was only 75.11 bcf/d in 2019. Analysis Group. *Natural Gas Pipeline Certification: Policy Considerations for a Changing Industry*, *op. cit.*, p. 1.

103 Many states allow no customer choice among gas shippers, and even for those that do allow some customer choice, the customer must still pay rates that address the rate of return on investment. For a state-by-state map of energy choice access, see Electric Choice. *Deregulated Energy States & Markets*. 2020.
receive what the court deems is a fair market value for the property, experts have raised concerns that the owner often is insufficiently compensated for the property encroachment. The D.C. Circuit Court of Appeals has observed:

“The law of our circuit is clear that a landowner is injured in fact when she is put to the choice of having to either reach an agreement with a pipeline seeking to access her property or have her property condemned. See Gunpowder Riverkeeper v. FERC, 807 F.3d 267, 271-72 (D.C. Cir. 2015) (‘[A] landowner made subject to eminent domain by a decision of the Commission has been injured in fact because the landowner will be forced either to sell its property to the pipeline company or to suffer the property to be taken through eminent domain.’)"

The court observed that the fact that the developer will compensate the landowner “does nothing to erase” the landowner’s injury.

- **Stigma of pipeline risks.** Landowners can be affected by the stigma of a gas pipeline, especially a high-pressure gas pipeline. Although challenging to prove in court, the concern about stigma has been amplified by pipeline explosion incidents. The U.S. Department of Transportation’s Pipeline and Hazardous Materials Safety Administration (PHMSA), for example, reported a December 2017 interstate pipeline explosion caused by a tenant farm operation installing a drainage tile that ruptured a 20-inch, high-pressure natural gas pipeline. The agency stated, “The escaping natural gas ignited almost immediately, killing the two owners, severely injuring one employee, and minimally injuring the other employee.” The risk is especially high for properties in areas vulnerable to landslides.

- **Construction-related damage.** A landowner is disadvantaged when the use of eminent domain results in construction-related property damage. While compensation is possible, some types of damage cannot easily be reversed. FERC granted a certificate of public convenience and necessity for the proposed pipeline, but the landowner was left to decide whether to suffer the damage or sell their property. The court observed that the developer will compensate the landowner “does nothing to erase” the landowner’s injury.

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104 United States v. 564.54 Acres of Land, 441 U.S. 506, 510–11 (1979). "Just compensation" for an easement is the difference in fair market value between the value of the entire property immediately before the taking and the remaining value immediately after the taking. See United States v. 97.19 Acres of Land, 582 F.2d 878, 881 (4th Cir. 1978).


106 *City of Oberlin v. FERC*, 937 F.3d at 604.

107 Ibid.

108 A Third Circuit Court of Appeals decision excluded stigma damages from “just compensation” for a taking when the plaintiff had provided specific examples of property devaluation from environmental risks only for a nuclear accident and oil spills. *UGI Sunbury LLC v. Permanent Easement for 1.7575 Acres*, 949 F.3d 825 (3d Cir. 2020).


Constitution pipeline, triggering eminent domain powers, that was “conditioned” on the developers obtaining other permits. The developers cut down more than 500 mature maple trees on farmland owned by the Holleran family in New Milford, Penn., without obtaining the necessary Clean Water Act §401 certification from New York. The certification was denied. While FERC later ruled that New York’s decision on the water quality certification had been made too late, the project did not go forward because the developers abandoned it. But the Holleran family’s trees, used for their maple syrup business, were gone.

- **Loss of autonomy.** Perhaps most difficult to measure, a landowner forced to accept a pipeline on his or her property suffers a limitation of autonomy in determining future uses of the land. Such a landowner must forever share the rights to the land with a corporation whose interests may not be consistent with those of the landowner.

### Adverse Impacts to the Economy

FERC’s flawed decision-making practices confer a regulatory benefit on a sector that is increasingly incapable of using that benefit to develop profitable concerns, and this curtails other activities that have greater benefits for investors and communities. By uncritically accepting the views of pipeline companies, FERC is compromising a whole host of other economic activities and rights that support value creation in other sectors of the economy. This value creation in other sectors is superior to the weak financial performance that the oil and gas sector has demonstrated over the last decade.

FERC’s failure to do its job places unreasonable burdens on states. The states are forced to undergo permit proceedings for unwise projects that should have been


114 The Holleran family’s land was not returned to them until 2020, over four years after the company damaged their farm. *Constitution Pipeline Company, LLC v. A Permanent Easement for 1.84 Acres and Temporary Easements for 3.33 Acres*, Docket No. 3:14-cv-02458-MEM, June 15, 2020. Also see: WHYY. *A family that lost hundreds of trees to failed pipeline project settles with company, gets land back*, July 3, 2020.

115 It can also cause harm in the oil and gas sector by leaving pre-existing pipelines at a competitive disadvantage, given the physical limitations of the customer base. See FERC. *Certificate Policy Statement. 88 FERC ¶ 61,227*, op. cit. p. 2.

116 See extensive discussion of the state of the industry in IEEFA. *New Mexico’s Risky Reliance on Oil Revenue Must Change*. October 2020, pp. 8-17. Investors are becoming increasingly skeptical of the oil and gas industry. See IEEFA. *From Zero to 50: Global Finance Is Fleeing Oil and Gas*. October 2020.
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halted at the outset and defend themselves against lawsuits by pipeline developers over permit denials of unnecessary projects. These state resources would be better spent building a sustainable clean energy future.

Corporate investment decisions are no substitute for an independent determination of the public interest. In fact, forcing companies to come to terms with the realities of market conditions and costs could result in better corporate decisions, halting ill-conceived projects earlier and saving everyone a lot of time and trouble. It is possible that asking early questions about need and alternatives could cause less-justifiable projects to be discarded before substantial agency and developer resources are wasted and litigation ensues.

Adverse Impacts of Overbuilding Are Likely to Worsen if FERC Continues to Ignore the Market Forces Trending Away from Gas-Burning

Multiple indications of shifts in the end-use market for both gas and oil—including trends that either pre-date the COVID-19 pandemic or are expected to continue to a substantial extent after the pandemic fades—make the winds of change impossible to ignore.

Consider electricity-generating utilities, which consume the largest amount (36 percent) of gas in the United States. The effects of increased energy efficiency and the rising competitiveness of renewable energy options are creating compelling trends. For example:

- Con Edison recently declared it will no longer invest in long-haul fossil gas pipelines and may even sell its existing pipeline portfolio. Chairman and CEO John McAvoy, speaking during an August 2020 investor presentation on environmental, social and governance (ESG) issues, said the view of gas having a big role in the transition to a clean energy economy “has largely changed,” and that “natural gas, while it can provide emissions reductions, is no longer... part of the longer-term view.”

- Electric utilities in Arizona, Colorado and Florida announced plans in June 2020 to close coal plants and rely on renewable energy generation—without

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118 Con Edison operates gas plants and provides home heating gas in parts of New York City and Westchester County.
adding any new gas-fired capacity to serve as a "bridge."\textsuperscript{120} The New Mexico State Public Regulation Commission in July approved a plan to replace the power from the coal-fired San Juan Generation Station with renewable energy in 2022.\textsuperscript{121} In October, Idaho Power issued its updated integrated resource plan, charting a course to be carbon free by 2025.\textsuperscript{122} This approach of skipping the gas "bridge" is consistent with choices made earlier in New York (Long Island) and Indiana.\textsuperscript{123}

- S&P Global reports that 21, or 70%, of the 30 largest U.S. electric and gas utilities have net-zero carbon equivalent targets or are moving to comply with a similar state mandate.\textsuperscript{124}

Gas also faces greater competition from electrification of home heating. The technology of electricity-saving air-source heat pumps and geothermal heat pumps has improved dramatically in the past several years.\textsuperscript{125} The New York State Energy Research and Development Authority (NYSERDA), for example, determined that air source heat pumps have become more effective in severe cold conditions. Because of their improved effectiveness, they’re now capable of addressing 43 percent of the thermal heat load on Long Island and 38 percent for small residential housing in New York City.\textsuperscript{126}

Efficiency gains and competitive renewables are advancing faster than many expected. It is no longer possible to ignore the direction of the change—and the impact on demand. This is an industry-wide dilemma. These trends are paring growth assumptions made by industry players who had predicted robust market expansion. Investor confidence in the oil and gas sector, including pipeline and transport companies, is badly damaged.\textsuperscript{127} Investors suspect that oil and gas interests have no coherent plan to achieve a turnaround of their failing revenues, weak cash flows, distressed asset values and generally negative outlook.\textsuperscript{128}

\textsuperscript{120} IEEFA. Utilities are now skipping the gas “bridge” in transition from coal to renewables. July 1, 2020.
\textsuperscript{121} Albuquerque Journal. PRC approves all-renewable plan for San Juan Generating Station. July 29, 2020.
\textsuperscript{124} S&P Global. Path to net zero: 70% of biggest US utilities have deep decarbonization targets. December 9, 2020.
\textsuperscript{125} Heat pumps are basically air conditioners that can run in reverse in the winter to provide heating. Heat pumps are efficient energy-savers even though they use some electricity. New Efficiency: New York Analysis of Residential Heat Pump Potential and Economics, Report No. 18-44. January 2019, pp. S-2 and 1.
\textsuperscript{126} Ibid., p. 17.
\textsuperscript{127} Currently, the energy sector comprises just 2.3% of the Standard & Poor’s 500-Stock Index, the smallest holding. In 1980, the oil and gas sector comprised 29% of the Index. In 2020, the value of stocks for pipelines and the energy transport sector is down 40%.
\textsuperscript{128} See CNBC. Pioneer Natural Resources CEO warns independent oil companies could go bankrupt if production continues amid coronavirus. March 26, 2020.
FERC’s lax approach to gas pipeline project review is not helping. Pipeline decisions made in the absence of full market information can have a direct and even cumulative adverse impact on investors, while the adverse impacts on landowners—and for ratepayers for domestic energy service—become more widespread.

FERC’s Failure to Respond to Public Comments and Act on Its Certification Policy Statement Reconsideration Process Is Head-in-the-Sand Behavior

As noted above, FERC launched a review of its Certificate Policy Statement in April 2018, inviting public comment on whether it should revisit its current policy. The comment period closed on July 25, 2018.129 A review of the docket of comments reveals a lively debate regarding energy efficiency, demand management programs and alternative energy. But then FERC did nothing. The record has been essentially silent since the comment period closed. FERC’s most recent update on its 2018 Notice of Inquiry process was a letter dated January 29, 2020, sent separately to several members of Congress, in which the agency sought to assure them that it was continuing to “consider the record in this proceeding.”130 Meanwhile, FERC continues to approve wasteful, unwise pipeline projects.

The agency could require more rigorous market analyses at the outset—which would save an enormous amount of time for all parties involved. Instead, it behaves as though it is completely oblivious to energy market forces.

Conclusion

The changing face of today’s energy market—combined with the adverse impacts of FERC’s approach to pipeline approval on energy consumers, landowners affected by use of eminent domain, and the overall economy—makes a compelling case for deeper scrutiny and earlier, more vigorous analysis of proposed pipeline projects.

FERC’s Strategic Plan states:

“By remaining aware and agile, FERC can adjust existing policies and develop new policies to ensure that consumers have reasonable access to needed services and that service providers are appropriately compensated in a rapidly changing marketplace.”131

131 FERC. Strategic Plan FY 2018-2022, op. cit. p. 3.
This is precisely what the agency has failed to do.

FERC's Certificate Analysis Policy is 21 years old. It's time to chart a more responsible course.
About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute’s mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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