Natural Gas Pipeline Permitting: Updating FERC’s Process for the 2020s and Beyond

Spring Webinar Series, The Payne Institute for Public Policy, Colorado School of Mines

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April 14, 2020
Overview of presentation

- **Context:**
  - The natural gas supply chain (and regulation of the elements)
  - Federal Energy Regulatory Commission’s (FERC’s) authority over approvals of gas pipelines
  - FERC’s 1999 Policy Statement for reviewing gas pipeline project proposals
  - Changes in the natural gas market since 1999

- **FERC Policy in the 2020s**
  - FERC’s request for comments on whether to revised its 1999 Policy Statement
  - Perspectives of stakeholders on how FERC should review projects

- **My point of view on how the pipeline approval process is working**
Context

Overview of the natural gas industry and its regulation
The system of economic regulation of the elements of the natural gas industry
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The Natural Gas Act (NGA) exempts production and gathering facilities from regulation by FERC.
The system of economic regulation of the elements of the natural gas industry

Focus of this presentation

The NGA authorizes FERC to set the rates, terms and conditions of gas transportation service and to determine whether proposed gas facilities are in the public interest.
The system of economic regulation of the elements of the natural gas industry

Largely unregulated by the federal and state governments (except for instances of market manipulation and market power).
The system of economic regulation of the elements of the natural gas industry

Rates, terms and conditions of service regulated by the states.
FERC jurisdiction over natural gas pipelines

- **Review of proposed pipeline projects**  
  - Under the NGA, pipeline companies seeking to expand pipeline capacity submit “certificate” applications for FERC to determine whether the “public convenience and necessity” (CPCN) requires the approval of the facilities (i.e., that they are in the public interest (needed)).
  - FERC conducts reviews of proposed pipelines under the National Environmental Policy Act (NEPA).

- **Setting rates and terms and conditions of service on pipelines**
  - FERC has the authority to ensure that pipeline rates are “just and reasonable.”
  - Rates include operating and maintenance expenses and an allowed return of and on capital invested in facilities used to serve customers.
In 1999, based on changes in conditions in the prior decade, FERC clarified its policy for determining whether to issue a CPCN for proposed interstate pipeline facilities.

- **FERC’s policy established that it would:**
  - Assess whether a project proposed by an established pipeline company would be subsidized by its existing customers.
  - Evaluate whether the applicant has attempted to minimize any adverse economic impacts on “Relevant Interests”—that is, impacts on:
    - the developer’s existing customers,
    - existing pipelines in the market or their captive customers, or
    - affected landowners.
  - Balance the evidence of public benefits against the expected adverse effects.
Changes in the gas market since 1999
Production and demand have increased substantially, and in parts of the country that had not been key suppliers of natural gas

U.S. Natural Gas Marketed Production (Wet) (Bcf)

EIA data.
Changes in the gas market since 1999

Natural gas prices are relatively low.

Henry Hub Natural Gas Spot Price
(Dollars per Million Btu)

EIA data.
Changes in the gas market since 1999
The power sector’s use of gas has increased significantly.

Natural Gas Consumed by the Electric Power Sector (Bcf)

EIA data.
Changes in the gas market since 1999

Significant changes in pipeline approvals

Number of Natural Gas Pipeline Approvals by FERC in Each Year
Since FERC Adopted its 1999 Policy Statement

Changes in the gas market since 1999

Significant changes in pipeline capacity additions

Amount of Pipeline Capacity (MMcf/d) Approved by FERC by Year Since FERC Adopted its 1999 Policy Statement

The bottom line

- Since adopting its 1999 Policy Statement 20 years ago:
  - FERC has approved 474 gas pipeline projects, representing 23,773 new miles of pipeline around the nation.
  - FERC has rejected only two projects.
- The incremental capacity additions approved by FERC since 1999 is nearly double the all-time record for gas use in a single day, set in January of 2019.
Expansion of the interstate gas pipeline system:

The system in 2000

The system in 2018

FERC’s pipeline certification approach in practice

And views about how it is working
Determining public benefits of new pipeline proposals

FERC’s practice

- When a pipeline company files an application for a certificate:
  - FERC looks to see if the company has an agreement (a “precedent agreement”) with someone who wishes to purchase capacity on the pipeline (called a “shipper”).
  - FERC treats such agreements as decisive in determining if a project is needed (i.e., in the public interest).
  - The theory is that, if a shipper wants to purchase capacity along a new pipeline (instead of an existing pipeline), then there must be a market demand for the new project.
  - FERC conducts an environmental review of the project’s impacts.
Determining public benefits of new pipeline proposals

FERC’s practice v. policy

- FERC does not typically look at other relevant factors to determine if the project is needed.
  - The 1999 Policy Statement stated that FERC would review “all relevant factors” related to the need for and benefits of the project.
  - FERC said that such factors include precedent agreements, demand projections, consumer cost savings, indications of access to supply, and whether the project was designed to meet new demand, or to support other outcomes on the gas system or electric grid.
  - FERC said it would focus on the balancing of economic interests with an eye toward fostering workable competition in the industry, but in ways that would not harm existing customers or provide incentives to overbuild.
  - Additionally, FERC would continue to conduct a full NEPA review for each project.
FERC’s 2018 request for comments on whether it should update its 1999 Policy Statement for reviewing pipeline requests

- FERC asked for comments on four topics:
  - FERC’s practice of relying on precedent agreements to demonstrate project need;
  - Implications of FERC’s decisions on pipeline companies’ potential exercise of eminent domain and on landowner interests;
  - The manner in which FERC evaluates project alternatives and environmental effects of proposed facilities under the NGA and NEPA; and
  - The efficiency and effectiveness of the Commission’s certificate processes.
- FERC received over 1,600 comments – most of which seek changes.
- FERC is still considering the comments (even as it continues to review and approve pipelines).
Positions regarding whether FERC should update its 1999 Policy Statement

- Comments fall into two clear clusters:
  - Retain the status quo
  - Revise the policy statement
Positions regarding whether FERC should update its 1999 Policy Statement

- Retain the status quo
  - This group: oil and/or gas companies, industry trade associations, business groups, large industrial gas consumers, labor unions, and politicians from mainly gas-producing states.
  - In their view, FERC’s approach is working well, appropriately identifies and supports determinations of project need, provides ample opportunities for public participation in the process, and properly addresses the environmental impacts of proposed projects.
  - An underlying premise of this perspective is that FERC’s role is to approve the development of new pipelines when at least two parties—a pipeline developer and a prospective shipper—want to and are willing to pay for that new capacity, and then to work to minimize the adverse environmental and landowner impacts associated with getting that pipeline sited, built and into operation.
Positions regarding whether FERC should update its 1999 Policy Statement

- **Revise the 1999 Policy Statement**
  - This group: state attorneys general, state utility and environmental regulatory agencies, politicians from states affected by pipeline projects or concerned about carbon emissions, academics and other industry experts, environmental organizations, publicly owned gas utilities, libertarian think tanks, and individual citizens.

- In their view, FERC should modify how it reviews projects.

- An underlying premise of this perspective is that FERC’s reviews should ensure that pipeline infrastructure additions occur only if they:
  - are required by the public interest after considering all relevant factors and produce greater benefits than costs (including through consideration of environmental externalities);
  - do not impose undue burdens on landowners and communities; and enable the orderly development of plentiful supplies of natural gas at reasonable prices.
Positions regarding whether FERC should update its 1999 Policy Statement

The core disagreement: how FERC does (and should) carry out its duties under the NGA and NEPA:

- **NGA**: “the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest, and that Federal regulation . . . is necessary in the public interest.”
  - The U.S. Supreme Court:
    - It has found that the principal purpose of the NGA is to serve the public’s interest in encouraging the orderly development of plentiful supplies of natural gas at reasonable prices.*
    - Rather than promoting natural gas development at any cost or in any manner, the NGA calls for doing so in an orderly and reasonable way.
- **NEPA**: requires FERC to take a “hard look” at the environmental impacts of a proposed project, including a no build alternative, and determine whether any environmental impacts would be significant.

My take-aways from reviewing the comments
Key findings
Regarding FERC’s need analysis (1)

- Re: FERC’s near-sole reliance on precedent agreements
  - FERC should give no special weight to precedent agreements in determining project need, and should give little weight to precedent agreements among affiliates without an analysis of whether such agreements result from the exercise of market power.
  - Such agreements are not enough to demonstrate project need because they reflect the private interests of two counterparties, and do not necessarily reflect the public interest.
  - FERC has a history of exercising vigilance in addressing the risk that affiliates will exercise vertical market power in providing non-affiliated parties with non-discriminatory access to needed delivery facilities (e.g., electric and gas transmission).
  - The Commission should bring the same care to its certification of proposed gas facilities.
Key findings
Regarding FERC’s need analysis (2)

- **Re: The role of benefit-cost analyses to determine project need.**
  - As an economic regulator, FERC should rely on a more systematic benefit/cost framework, including information about economic and environmental benefits and costs, without necessarily converting all impacts into dollars.
  - FERC would evaluate whether a project proposal’s unmitigated environmental impacts (i.e., externalities), when combined with any other residual adverse economic impacts on Relevant Interests, outweigh the benefits of the project (e.g., to the counterparties in any precedent agreements).
  - Such an approach could make use of the kinds of information that FERC already collects on projects over the combined course of its NGA need analysis and NEPA environmental review.
  - FERC’s responsibility as an economic regulatory agency should acknowledge that a project’s environmental impacts have economic costs (i.e., externalities) that should be taken into account as part of the public interest finding.
Key findings
Regarding FERC’s need analysis (3)

- Re: Foundations of the CPCN
  - The origins of the CPCN point to reasons why FERC should and can conduct more fulsome reviews of whether a new pipeline is needed.
  - Before the NGA was enacted in 1938, states were responsible for issuing CPCNs for pipelines.
  - These state-regulatory origins (which continue to this day in state reviews of many other types of energy facilities, such as electric transmission lines) support a more robust need assessment by FERC.
  - These origins also suggest (through examples from the states’ current practices) that such reviews are within the analytic and evidentiary capability of utility regulators.
  - FERC does not shy away from complex analyses in other areas of policy (e.g., enforcement actions; horizontal market power in wholesale power markets; vertical market power in ensuring non-discriminatory access to transmission).
Key findings

Regarding FERC’s need analysis (4)

Re: Scope of need analyses

- FERC’s need analysis should broaden its review of impacts on different constituencies.
- FERC should examine “all relevant factors” in determining need—as explicitly called for in the 1999 Policy Statement.
- FERC could rely on many different types of information in an “all relevant factors” approach, including:
  - information from the open season process;
  - intended uses of gas by shippers that have signed precedent agreements;
  - any affiliate relationships among shippers and project sponsors;
  - anticipated impacts on Relevant Interests and others;
  - state policies relating to energy and reduction of greenhouse gas (“GHG”) emissions; and
  - the utilization of other pipeline infrastructure in the region.
**Key findings**

Regarding FERC’s consideration of impacts on landowners affected by a pipeline (1)

**Re: Eminent domain.**

- Where a project developer has not acquired land rights along the project’s right of way, the Certificate allows the pipeline company to take land through eminent domain and “for the public interest.”
- FERC should give great weight to landowners’ interests in such situations.
- FERC should assure that it issues certificates only to projects with a public purpose, and reliance on precedent agreements is insufficient to establish that public purpose.
- Unless FERC modifies its approach to determining need, there is no assurance that the taking of private land is for a public purpose (not a private purpose) as required by the Constitution.
- This is relevant for land owned by private individuals but also land owned by government organization (e.g., state parks, conservation land), which itself is set aside for the public’s interest.
Re: Conditional permits and landowners’ interests.

- FERC’s current practice is to issue “conditional” CPCNs where the applicant has not obtained all other federally mandated permits (e.g., water permits) by the time of FERC action.

- Until it is clear that those permits will be issued by other federal agencies, no action should be taken that impact land.

- But under FERC’s conditional permits, project applicants can proceed to condemn private property and may be permitted to begin significant pre-construction activities (e.g., tree felling).

- FERC should either refrain from issuing conditional CPCNs or should incorporate language in any conditional CPCN so as to explicitly limit the ability of the pipeline company to disturb landowners’ property for the project until (and if) all of the required approvals are issued.
Key findings
Regarding FERC’s evaluation of the environmental impact of proposed facilities (1)

Re: Stronger NEPA assessments and use of the findings in need determinations.

- FERC should expand its determination of significant versus non-significant impacts.
- Economic regulation, in the context of reviewing projects for CPCNs, should take such environmental impacts into account because those costs of those externalities are not reflected in prices.
- FERC’s practice of concluding that (a) it is too hard, uncertain, or unforeseeable to identify, assess, and calculate some impacts (e.g., of the GHG emissions associated with a pipeline), and (b) such impacts are insignificant (in a NEPA review), leads to a structural bias in FERC’s environmental and need determinations.
- FERC does not shy away from addressing issues affected by uncertainty and complexity in other important issues on which the Commission is charged with making decisions.
- Uncertainty and complexity in the evidentiary records on Section 7 applications should not be grounds for FERC to short-shrift its NEPA and NGA obligations.
Key findings

Regarding FERC’s evaluation of the environmental impact of proposed facilities (2)

Re: Satisfying NEPA’s “hard look” standard.

- Under NEPA, FERC has an obligation to examine project alternatives “to the fullest extent possible” (including a no-project alternative).
- And under the NGA, FERC also has public-interest obligations to approve projects only when they are needed.
- A serious review of no-project alternatives would inform that question of need.
- FERC’s review need to be expanded to meet this standard.
Key findings

Regarding FERC’s evaluation of the environmental impact of proposed facilities (3)

Re: Federal jurisdiction over pipeline siting and consideration of states’ views.

- FERC should give great weight to state policies in considering and weighing environmental impacts.
- Many states have energy or climate-related statutes that may be affected by pipeline projects, and to avoid the disorderly development of gas delivery infrastructure that will not be needed to serve markets where there will need to be much lower GHG emissions in the future.
Key findings
Regarding FERC’s evaluation of the environmental impact of proposed facilities (4)

Re: Consideration of direct and indirect impacts of projects.

- Direct impacts of a project include environmental disturbances associated with the pipeline; indirect impacts include impacts associated with the gas transported through the facilities.

- FERC selectively consider such indirect impacts in its reviews:
  - FERC often recognizes the reduction in air emissions associated with use of gas to displace higher-emitting fossil fuels. But recent FERC decisions have declined to look at GHG emissions from gas use because the agency “does not have authority over them.”
  - NEPA reviews by other federal agencies have not adopted so narrow a view when they examine the environmental implications of a new road or bridge project. Those reviews go beyond the direct impacts of the project itself and look at the impacts from vehicles on the facility—presumably because its very purpose is to serve such vehicles.
Key findings
Regarding FERC’s evaluation of the environmental impact of proposed facilities (5)

Re: Considering GHG emissions impacts.

- Policymakers increasingly rely on quantitative metrics to evaluate the impact of GHG emissions, including through use of the Social Cost of Carbon.

- Clearly, GHG emissions impose costs and risks on society—including on peoples’ health and wellbeing, on infrastructure security, on the natural environment and economic activity—as discussed extensively in the scientific literature on the impacts of climate change.

- FERC has deep experience in relying upon quantitative estimates in other areas of its work (e.g., in market-power analyses supporting requests for market-based rate authority).

- FERC should not shy away from reviewing records where applicants and others introduce quantitative, monetary estimates of the direct and indirect impacts of pipelines’ GHG emissions.
Key findings
Regarding FERC’s evaluation of the environmental impact of proposed facilities (5)

Re: Impacts on environmental justice communities and on tribes.

- The 1999 Policy Statement calls for FERC to consider the distributional impacts of pipelines across stakeholder communities.

- FERC’s approach to date, however, has been too narrow (because it focuses on the existing customers of the pipeline, competing pipelines, landowners, parties to precedent agreements).

- Given the disproportionate and cumulative adverse impacts on those EJ communities and tribes compared to the benefits they derive from pipeline projects, FERC reviews should explicitly consider the character of impacts on such groups and give great weight to them in its NEPA and NGA determinations.
Conclusions
FERC should update its Policy Statement for 21st Century conditions in U.S. gas markets

FERC’s decisions since 1999 have led to significant expansion of the nation’s gas pipeline system and provided consumers will access to low-cost domestic gas supplies.

The gas market will not likely continue to expand at the same rate, given policies in many states to reduce GHG emissions in their energy systems.

FERC’s reviews have become increasingly contentious.

FERC should modify its reviews to ensure that pipeline infrastructure additions occur only if they:
- are required by the public interest after considering all relevant factors;
- produce greater benefits than costs;
- do not impose undue burdens on landowners and communities; and
- enable the orderly development of of natural gas at reasonable prices.

Reforms would help restore public confidence in FERC’s decisions.

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