



MEMORANDUM

February 4, 2020

To: House Energy and Commerce Committee
Attention: Brandon Mooney

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Subject: **The Natural Gas Act: Overview, Analysis, and Comparison with Federal Power Act Ratemaking Authority**

This memorandum¹ responds to your request for an updated review of selected subjects related to the Natural Gas Act (NGA), focusing on ratemaking and refund authority.² The memorandum discusses the Federal Energy Regulatory Commission (FERC or Commission) process for setting and reviewing rates for natural gas in interstate commerce under NGA Sections 4 and 5; reviews recent FERC proceedings initiated under NGA Section 5; analyzes policy issues related to natural gas ratemaking; and compares the ratemaking methodology for natural gas under the NGA and the ratemaking methodology for electric power under Part II of the Federal Power Act (FPA).³

Interstate Natural Gas Transportation Ratemaking Under Natural Gas Act (NGA) Sections 4 and 5

The NGA governs the transportation of natural gas in interstate commerce, the sale of natural gas in interstate commerce for resale for ultimate public consumption, and the companies that engage in such transportation or sale.⁴ Section 4 of the NGA requires that “[a]ll rates and charges made, demanded or received by any natural gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the Commission . . . shall be just and reasonable, and any such rate or charge that is not just and reasonable is declared to be invalid.”⁵ Section 4 also allows interstate natural gas

¹ This memorandum is an updated version of a previous CRS memorandum prepared for your office dated November 23, 2015. Information in the memorandum is drawn from publicly available sources and is of general interest to Congress. As such, all or part of this information may be provided by CRS in memoranda or reports for general distribution to Congress. Your confidentiality as a requester will be preserved in any case.

² 15 U.S.C. § 717 *et seq.*

³ 16 U.S.C. § 824 *et seq.*

⁴ 15 U.S.C. § 717(a).

⁵ 15 U.S.C. § 717c(a). Rates for transportation or sale of natural gas in interstate commerce are “subject to the jurisdiction of the

companies to file applications with FERC to change their rates at any time.⁶ The rates and other terms of service for natural gas transportation are set forth in “tariffs” submitted to the Commission by the interstate pipelines. The pipeline companies file their tariffs and any proposed changes thereto according to 18 C.F.R. Part 154. Natural gas companies are also required to file an annual report called a “Form 2” providing FERC and pipeline customers with information about pipeline operations and revenue.⁷ The regulations also require less extensive quarterly filings.⁸

Natural gas transportation rates are generally set in accordance with one of two basic methodologies: cost-based rates or negotiated rates.⁹ Cost-based rate methodology was enacted as part of the NGA in 1938.¹⁰ Under the cost-based methodology, rates are based on the cost of providing pipeline service, as established during a Section 4 rate case, plus an amount that allows the pipeline company to earn a reasonable return on its investment.¹¹ This methodology is the default methodology for setting transportation rates for interstate natural gas pipelines subject to FERC jurisdiction.

In 1996, FERC granted jurisdictional pipeline companies the option of charging negotiated rates instead of cost-based rates.¹² Under this program, pipeline companies and their shipper customers are free to negotiate transportation rates that vary from the pipeline’s established cost-based rates.¹³ However, the pipeline companies must also offer a cost-based rate as recourse for customers preferring that pricing and as a way to guard against a company exercising its market power improperly.¹⁴

NGA Section 5 allows FERC and third parties to challenge the rates established by pipeline companies. Section 5 provides that

[w]henever the Commission, after a hearing had upon its own motion or upon complaint of any State, municipality, State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged or collected by any natural gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice or contract affecting such rate, charge or classification is unjust, unreasonable, unduly discriminatory or preferential, the Commission shall

Commission” pursuant to 15 U.S.C. §717(a). References to the “Commission” in the NGA do not refer to FERC, but rather to the now-defunct Federal Power Commission. In 1977 the Federal Power Commission was dissolved and its responsibilities were transferred to the Department of Energy and to FERC pursuant to the Department of Energy Organization Act (P.L. 95-91). Section 402(a)(1)(C) of that Act assigned oversight of rates for natural gas transportation and sale to FERC.

⁶ 15 U.S.C. § 717c(d).

⁷ 18 C.F.R. §§ 260.1, 260.2.

⁸ 18 C.F.R. § 260.300.

⁹ As per your request, this memorandum will focus on FERC-jurisdictional rates for natural gas transportation rather than FERC-jurisdictional sales of natural gas.

¹⁰ For further discussion of the history of natural gas pipeline transportation ratemaking, see Order No. 636, *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation Under Part 284 of the Commission’s Regulations*, FERC Stats. and Regs. ¶ 30,939 (1992), at *11-22.

¹¹ *Cost-of-Service Rates Manual*, FERC, June 1999, at 1. A link to the Cost-of-Service Rates Manual can be found at <http://www.ferc.gov/industries/gas/gen-info.asp>.

¹² *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines, Regulation of Negotiated Transportation Services*, 74 FERC ¶ 61,076, order on clarification, 74 FERC ¶ 61,194, order on reh’g, 75 FERC ¶ 61,024 (1996).

¹³ *Id.* Parties might choose to negotiate rates for a number of reasons, including added flexibility or long-term certainty regarding pricing or access to pipeline capacity.

¹⁴ *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines, Regulation of Negotiated Transportation Services*, 74 FERC ¶ 61,076 at 61,238-242 (1996).

determine the just and reasonable rate, charge, classification, rule, regulation, practice of contract to be thereafter observed and in force, and shall fix the same by order¹⁵

Although the statutory language authorizes only states, municipalities, state commissions, and gas distributing companies to bring third-party challenges, FERC and the courts have since determined that if a party other than the entities specifically enumerated in Section 5 files a complaint against a natural gas company, the complaint will be interpreted as a request for FERC to initiate an investigation at their discretion.¹⁶ Note also that Section 5 does not authorize retroactive adjustments to rates even if FERC finds the rate as unjust or unreasonable, only allowing FERC to order that the just and reasonable rate to be “thereafter observed and in force.”¹⁷

Recent Section 5 Rate Proceedings

This section of the memorandum provides examples from 2009 to present of Section 5 challenges to natural gas transportation rates initiated by FERC or by a third-party complaint, including a brief summary of the issues and outcome of each proceeding.

Proceedings Initiated by FERC

- **Natural Gas Pipeline Company of America (Natural):** In 2009, FERC analyzed gas companies’ earnings reported on Form 2s filed in 2008, finding that Natural earned a return substantially above a just and reasonable rate of return. As a result, FERC initiated a Section 5 proceeding against the company.¹⁸ Eventually, FERC, Natural, and its shippers reached a settlement that required Natural to reduce transportation rates by approximately 8%, storage rates by 3%, and fuel retention rates by 45%.¹⁹
- **Great Lakes Gas Transmission Limited Partnership (Great Lakes):** Great Lakes was also identified in the 2009 FERC investigation as a pipeline company earning a return substantially above a just and reasonable rate of return, and FERC initiated a Section 5 proceeding against them in 2009.²⁰ As with Natural, Great Lakes eventually reached a settlement with FERC and their shippers, requiring Great Lakes to reduce its transportation rates by approximately 8%, to share 50% of revenue in excess of \$500 million over a two-year period with qualifying shippers, and to delay its next Section 4 rate filing until an agreed-upon date.
- **Kinder Morgan Interstate Gas Transmission LLC (Kinder Morgan):** In 2010, FERC performed another analysis of jurisdictional gas company earnings based on 2008 and 2009 Form 2 filings. That analysis resulted in two more Section 5 proceedings, one of which alleged that Kinder Morgan’s earnings were substantially in excess of its cost of service including a reasonable rate of return.²¹ FERC and Kinder Morgan reached a

¹⁵ 15 U.S.C. § 717d(a).

¹⁶ See *Panhandle v. Southwest Gas Storage Co.*, 117 FERC ¶ 61,318, at P21 (2006), *citing* *General Motors Corp. v. Federal Power Commission*, 613 F.2d 939 (D.C. Cir. 1979).

¹⁷ 15 U.S.C. § 717d(a).

¹⁸ *Natural Gas Pipeline Co. of America, LLC*, 129 FERC ¶ 61,158 (2009).

¹⁹ *Natural Gas Pipeline Co. of America, LLC*, 132 FERC ¶ 61,082 (2010).

²⁰ *Great Lakes Gas Transmission Limited Partnership*, 129 FERC ¶ 61,160 (2009).

²¹ *Kinder Morgan Interstate Gas Transmission LLC*, 133 FERC ¶ 61,157 (2010).

settlement requiring Kinder Morgan to reduce “Fuel and Loss Reimbursement” percentages owed by shippers by 27-30% depending on route.²²

- **Bear Creek Gas Storage Company, LLC (Bear Creek):** Bear Creek was one of three jurisdictional gas companies named in Section 5 proceedings as a result of a 2011 FERC analysis of Form 2 filings. Bear Creek had not adjusted its rates in a Section 4 filing in 22 years. FERC alleged that based on the Form 2 filing data, Bear Creek’s level of earnings could be substantially in excess of its actual cost of service, including a reasonable return on equity.²³ Bear Creek and FERC reached a settlement that required Bear Creek to make modifications to the “Fuel Adjustment” portion of its tariff to prohibit recovery of certain losses from its customers and to require annual fuel filings.²⁴
- **Wyoming Interstate Company, LLC (Wyoming):** Wyoming was one of two jurisdictional gas companies named in Section 5 proceedings as a result of a 2012 FERC analysis of Form 2 filings. As with the companies named in the other Section 5 proceedings listed above, FERC expressed concern that Wyoming’s level of earnings substantially exceeded its actual cost of service, including a reasonable return on equity.²⁵ Wyoming, FERC, and a number of third-party Wyoming customers who joined the proceedings reached a settlement establishing “lower rates” (no reduction percentage was specified) as well as base-rate certainty for Wyoming customers.²⁶

Electronic correspondence with FERC officials conducted per your request indicated that FERC analyzed data from Form 2 filings in 2013 and 2014, as it had done in previous years, but that neither analysis resulted in the initiation of any Section 5 proceedings. CRS searches of FERC’s e-library of agency filings likewise did not produce any results indicating that FERC initiated a Section 5 proceeding during those years. However, since 2014, FERC has initiated several Section 5 proceedings.

- **Columbia Gulf Transmission, LLC (Columbia Gulf):** The Commission reviewed the Form 2 filings of Columbia Gulf for years 2013 and 2014, discerned the company’s estimated return on equity for those years, and concluded it was “concerned that Columbia Gulf’s level of earnings may substantially exceed its actual cost of service, including a reasonable return on equity.”²⁷ The parties reached a settlement that requires Columbia Gulf to reduce certain rates and to file a Section 4 rate case by January 31, 2020.²⁸
- **Wyoming Interstate Company, LLC:** Wyoming was once again the subject of a Section 5 proceeding after FERC’s review of Wyoming’s Form 2 filings for 2014 and 2015. Based on its estimates of Wyoming’s return on equity for those years, FERC again expressed concern that Wyoming’s “level of earnings may substantially exceed its actual cost of service, including a reasonable return on equity.”²⁹ As it has done in other proceedings, FERC ordered Wyoming to file updated cost and revenue studies to inform

²² Kinder Morgan Interstate Gas Transmission LLC, 136 FERC ¶ 61,201 (2011).

²³ Bear Creek Storage Co. LLC, 137 FERC ¶ 61,134 (2011).

²⁴ Bear Creek Storage Co. LLC, 140 FERC ¶ 61,129 (2012).

²⁵ Wyoming Interstate Co., LLC, 141 FERC ¶ 61,117 (2012).

²⁶ Wyoming Interstate Co., LLC, 144 FERC ¶ 63,004 (2013).

²⁷ Columbia Gulf Transmission, LLC, 154 FERC ¶ 61,027 (2016).

²⁸ Columbia Gulf Transmission, LLC, 156 FERC ¶ 61,119 (2016).

²⁹ Wyoming Interstate Co., LLC, 158 FERC ¶ 61,040 (2017).

the inquiry into the pipeline's rates.³⁰ The parties subsequently reached a settlement providing for refunds as well as certain depreciation and amortization rates and a cost recovery mechanism for certain upgrades.³¹

On July 18, 2016, FERC issued Order No. 849,³² a final rule that adopted procedures for determining whether natural gas companies subject to FERC jurisdiction may be collecting unjust and unreasonable rates because of (1) income tax changes under the 2017 tax revisions, and (2) a change to Commission policy on taxation of limited partnerships in response to a judicial decision. Order No. 849 directs all jurisdictional natural gas companies that charge cost-based rates to file FERC Form No. 501-G, an informational filing containing a cost and revenue study using data from the companies' Form 2 filings. Order No. 849 gave companies several options to address changes to their revenue requirement resulting from the taxation changes. This new filing requirement led to several new Section 5 proceedings, including but not limited to the following:

- **East Tennessee Natural Gas, LLC (East Tennessee):** East Tennessee filed a Section 4 rate reduction for reduced cost-of-service due to tax changes as reflected in its Form No. 501-G. After reviewing the filing and the form, FERC held that "East Tennessee's proposal to reduce its rates by 1.0 % is consistent with . . . the Commission's regulations. Accordingly, the Commission accepts that tariff record effective December 1, 2018. However, the Commission also finds that East Tennessee may be collecting unjust and unreasonable rates, and establishes procedures to investigate those rates under NGA section 5."³³ FERC and East Tennessee subsequently reached a settlement setting short-term rates and requiring the East Tennessee to file a new Section 4 rate case by June 30, 2020.³⁴
- **Southwest Gas Storage Company (Southwest):** On November 8, 2018, Southwest filed Form 501-G in accordance with the requirements of Order No. 849. The form showed an estimated return on equity of 18.8 % after adjustment to the corporate income tax rate as provided by the Tax Cuts and Jobs Act. Southwest elected not to modify its rates in this filing, claiming that it should be exempt from rate adjustments because all of its storage agreements are at negotiated rates. FERC rejected this argument, noting that Southwest's only firm service customer was Panhandle Eastern Pipe Line Company, L.P., an affiliate company. FERC found that this arrangement warranted extra scrutiny, and initiated a Section 5 rate investigation, noting that "as these rates may become a cost-of-service component in Panhandle's³⁵ [pipeline] rates, initiating an NGA Section 5 rate investigation now is important to ensure that any reduction in Southwest Gas Storage's rates occurs in time to be reflected in Panhandle's rates."³⁶ FERC and Southwest subsequently reached a settlement regarding all of Southwest's rates except the negotiated rate with Panhandle, with consideration of that rate ongoing.³⁷

³⁰ *Id.*

³¹ Wyoming Interstate Co., LLC, 161 FERC ¶ 61,223 (2017).

³² *Interstate and Intrastate Natural Gas Pipelines; Rate Changes Related to Federal Income Tax Rate*, Order No. 849, 164 FERC ¶ 61,031 (2018), *order on reh'g*, Order No. 849-A, 167 FERC ¶ 61,051 (2019).

³³ East Tennessee Natural Gas, LLC, 165 FERC ¶ 61,198 (2018).

³⁴ East Tennessee Natural Gas, LLC, 169 FERC ¶ 61,002 (2019).

³⁵ Southwest Gas Storage Co., 166 FERC ¶ 61,117 (2019).

³⁶ *Id.*

³⁷ Southwest Gas Storage Co., 169 FERC ¶ 61,078 (2019).

Proceedings Initiated Upon Third Party Complaint

Our research and our discussions with FERC at your request have revealed only example of a Section 5 proceeding since 2009 initiated upon third party complaint. In 2011, the Public Utilities Commission of Nevada and Sierra Pacific Power Company filed a Section 5 complaint alleging that the natural gas transportation rates of Tuscarora Gas Transmission Company were unjust and unreasonable. Although FERC set the matter for public hearing,³⁸ the parties reached a settlement prior to the hearing. The settlement terms established new rates accounting for various costs in dispute, including previous expansion costs, depreciation rates and IT costs, and a three-year moratorium on the filing of any further Section 4 or Section 5 filings attempting to adjust the relevant rates.³⁹

It is not clear why there is a relative lack of Section 5 proceedings initiated by third parties. One possibility is that the litigation costs are prohibitive relative to the potential recovery for pipeline customers. Another factor may be the emergence of the negotiated rates option which gives customers and pipelines the ability to find mutually agreeable rates that the customers would presumably be less likely to challenge as unjust or unreasonable.

Ratemaking for Electric Power Under the Federal Power Act: How Does it Compare to the Natural Gas Act Framework?

The NGA sections discussed above have parallels to Sections 205 and 206 of the FPA, which mandates that rates and charges “for or in connection with the transmission or sale of electric energy subject to the jurisdiction of the Commission . . . shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful.”⁴⁰ However, Section 206 of the FPA also authorizes the recovery of retroactive or “refund” rates in some circumstances.⁴¹ The FPA’s ratemaking mechanism under Section 206, and possible explanations for the differences between the remedies available under FPA and the NGA for unjust or unreasonable rates, are discussed herein.

Legislative History

When enacted, FPA Section 206 did not authorize the Commission to impose refunds. The section was amended in 1988 to provide that “[w]henver the Commission institutes a proceeding under this section, the Commission shall establish a refund effective date” and authorized the Commission to “order the public utility to make refunds of any amounts paid, for the period subsequent to the refund effective date through a date fifteen months after such refund effective date, in excess of those which would have been paid under the just and reasonable rate . . . which the Commission orders to be thereafter observed and in force.”⁴² In 2005, Section 206 was further amended to alter some of the deadlines applicable to parties involved in the process.⁴³ CRS’s preliminary legislative history research into FERC’s Section 206 refund authority has revealed a brief acknowledgement by legislators of the disparity between the refund

³⁸ Public Utilities Commission of Nevada and Sierra Pacific Power Company d/b/a NV Energy v. Tuscarora Gas Transmission Company, 135 FERC ¶ 61,174 (2011).

³⁹ Public Utilities Commission of Nevada and Sierra Pacific Power Company d/b/a NV Energy v. Tuscarora Gas Transmission Company, 138 FERC ¶ 63,008 (2012).

⁴⁰ 16 U.S.C. § 824d(a).

⁴¹ *Id.* at § 824e.

⁴² Regulatory Fairness Act, Pub. Law No. 100-471 (1988), at § 2.

⁴³ Energy Policy Act of 2005, Pub. Law No. 109-58 (2005), at §§1285, 1286 and 1295.

authority given to FERC in Section 206 of the FPA and the absence of similar authority in NGA Section 5 prior to passage of either bill.

The disparity was raised in post-hearing questions posed to FERC by members of the Senate Committee on Energy and Natural Resources after a hearing on legislation to give FERC refund authority under Section 206. One Senator asked the FERC Chair at the time to ask the FERC General Counsel for “an opinion on the legal impacts of amending FPA section 206 to provide refunds to consumers as contemplated in S. 1567 while not amending NGA section 5 in the same manner.”⁴⁴ The FERC staff response did not address the disparity from a policy standpoint, focusing instead on the extent to which Section 206 of the FPA and Section 5 of the NGA would continue to be interchangeable in terms of precedent in litigation matters.⁴⁵ The Senator also asked whether, “as a regulatory fairness principle should gas consumers relying on the Commission for protection under the NGA be afforded the same protection that electric consumers receive under the FPA?” FERC responded that “[t]he principles underlying the two statutes are similar, and consumers generally should receive similar protection under both statutes relating to rate regulation of interstate sales and transportation by electric utilities and interstate gas pipelines.”⁴⁶

Ratemaking Methodology under the Federal Power Act and Justification for FERC Authority to Adjust Retroactively Electric Power Rates

FERC reviews filings for public utilities seeking to establish or change rates under FPA Section 205, and hears complaints or requests to change rates under FPA Section 206. Similarly, FERC can initiate its own investigation of rates under FPA Section 206. Both the FPA and the NGA require that rates, terms, and conditions of service be “just and reasonable,” and “not unduly discriminatory or preferential.” Differences in rates can be deemed “just and reasonable” if the difference can be justified by cost or market conditions, and therefore are unlikely to be “unduly discriminatory or preferential.” The burden of proof in a FPA Section 206 proceeding is likewise on the FERC or the complainant to show that the existing rate or tariff is not just and reasonable. The Commission can alter “existing rates, terms, and conditions of jurisdictional service” prospectively (i.e., going forward) under both FPA Section 206 and NGA Section 5, if it finds that such rates are no longer just and reasonable.⁴⁷

However, while the standards for fair rates and charges are similar for natural gas and electricity transportation and rates, the remedies available to FERC for violations in electricity cases are more robust than the remedies for violations in natural gas cases. Congress amended the FPA to provide refunds if FERC finds that transmission providers have overcharged customers.⁴⁸ Under FPA Section 206, if the Commission finds that any rate or condition is not just and reasonable, or is unduly discriminatory, it can increase or decrease the rate. While the new rate cannot be retroactive, in a complaint-initiated case, FERC can order refunds⁴⁹ up to 15 months beginning as early as the date the complaint is filed (or as late as five months from the filing date). In a FERC-initiated case, refunds can also be ordered for up to a 15-

⁴⁴ To Provide for Refunds Pursuant to Rate Decreases Under the Federal Power Act: Hearing Before the Committee on Energy and Natural Resources, S. Hrg. 100-542, at 181 (1987).

⁴⁵ *Id.*

⁴⁶ *Id.* at 182.

⁴⁷ 113 FERC ¶ 61,317 per 16 U.S.C. § 824d; 15 U.S.C. § 717c.

⁴⁸ The refund provision was originally introduced by the Regulatory Fairness Act of 1988 (P.L. 100-473) as an amendment to FPA, directing FERC to order a public utility to refund (with interest) those amounts determined by the Commission to be in excess of just and reasonable rates or charges.

⁴⁹ These refunds are calculated as the difference between the rate charged and the rate FERC determines to be just and reasonable. See FPA Section 206(b).

month period, beginning as soon as the Commission publishes a notice that the case has been initiated or as late as five months from the date FERC publishes a notice that a case has been initiated.⁵⁰

Suitability of Retroactive Ratemaking Authority for Natural Gas Transportation and Sale

As noted above, a NGA Section 5 proceeding does not include a comparable 15-month “refund window”. If FERC finds pipeline companies in violation of just and reasonable rate standards under NGA Section 5 (which is essentially the same as FPA Section 206), it could be argued that a parallel refund remedy should be available to FERC based on the same regulatory fairness arguments that supported amending the FPA.

The lack of a refund remedy for natural gas violations was recently raised as an issue by the Natural Gas Supply Association (NGSA), which represents large natural gas producers, suppliers and marketers, in the release of a study purporting to show that natural gas pipelines are overcharging customers due to “excessive” rates of return on equity.⁵¹ NGSA therefore urged Congress to amend the NGA to allow for refunds if FERC finds that the pipeline company charged rates that are “too high.” However, interstate pipeline companies argued that allowing such refunds would adversely affect their ability to invest in needed infrastructure to accommodate expanding domestic natural gas production.

Differences exist between the basic mechanisms used for development of electricity transmission rates and natural gas transportation rates. Some of these differences are due to the physical differences in transporting each commodity from producer (or generator) to customer, with a major difference being the lack of storage for electricity. Electricity transmission rates are largely based on formula rates,⁵² while natural gas rates are more often based on a cost of service determined by a “test period” focused on pipeline functions such as gathering, transmission, and storage.⁵³ However, FERC has made recent changes apparently moving natural gas pipelines closer to the formula rates used in electric transmission. In seeking to aid pipeline modernization efforts, FERC upheld a 2105 decision issuing a list of standards for interstate pipelines to meet if these companies are to recover certain costs through surcharges or cost trackers.⁵⁴ These standards limited the trackers to surcharges to meet safety or environmental regulations for base rates recently reviewed in a NGA Section 4 filing.

Policy Considerations for Natural Gas Pipeline Rates

Given the importance of oil and natural gas pipelines to the nation’s economy, FERC’s policies regarding pipeline rates, rate reviews, and possible refunds have been a frequent concern of Congress. In the current

⁵⁰ Lawrence Greenfield, *An Overview of the Federal Energy Regulatory Commission and Federal Energy Regulatory Commission in the United States*, FERC, December 2010, pp. 26-27, <http://ferc.gov/about/ferc-does/ferc101.pdf>.

⁵¹ Natural Gas Supply Association, *Excessive Pipeline Rates Cost Customers Billions of Dollars - NGA Section 5 reform needed to rein in cases of excessive pipeline earnings*, NGSA Pipeline Cost Recovery Report 2009-2013, p. 2015, http://www.ngsa.org/download/issues/Section%205%20Reform%201-pager_final%2008312015.pdf.

⁵² A formula rate involves a forward-looking collection of rates based on a projected budget, and is used to calculate the cost of service. Annually, the rate is trued up to reflect actual spending, and serves as the basis for the subsequent year’s rate.

⁵³ See Energy Information Administration, *Energy Policy Act Transportation Study: Interim Report on Natural Gas Flows and Rates*, 1995, http://www.eia.gov/pub/oil_gas/natural_gas/analysis_publications/energy_policy_act_transportation_study/pdf/epactpd.pdf.

⁵⁴ “The cost trackers would enable the pipelines to expeditiously make infrastructure improvements to respond to government safety and environmental initiatives.” See Ellen Beswick, *FERC Upholds Gas Pipeline Surcharge Policy, Rejects Call For Formalized Procedures*, Natural Gas Intelligence, July 16, 2015, <http://www.naturalgasintel.com/articles/103012-ferc-upholds-gas-pipeline-surcharge-policy-rejects-call-for-formalized-procedures>.

energy market environment, several particular issues may warrant further consideration as Congress oversees FERC's ratemaking activities.

Pipeline Returns on Equity

As economically regulated entities, FERC-jurisdictional pipeline companies must have the *opportunity* to earn a sufficient return on equity (ROE) to operate profitably and attract investment capital. Historically, FERC has employed base ROEs based upon a discounted cash flow (DCF) methodology to establish pipeline rates. However, a 2017 federal court opinion regarding a FERC-regulated electric transmission tariff challenged aspects of FERC's justification for the base ROE.⁵⁵ In response, FERC initiated a broad Notice of Inquiry (NOI) examining "whether, and if so how, it should modify its policies concerning the determination of the [ROE] to be used in designing jurisdictional rates charged by public utilities" and "whether any changes ... should be applied to interstate natural gas and oil pipelines."⁵⁶ The comment period for this NOI closed on June 6, 2019, but FERC has not yet published its conclusions.

Numerous stakeholders submitted comments raising many issues related to FERC's approach to determining ROE in response to the inquiry. It is beyond the scope of this memo to summarize them; however a fundamental concern highlighted by the court case was FERC's setting of a relatively high ROE in the face of "anomalous capital market conditions" for electric transmission.⁵⁷ This issue may raise the question of whether "anomalous" capital market conditions also exist in the pipeline industry. Some analysts have suggested, on the one hand, that given overall capital market conditions (e.g., low bond market yields) FERC may "not be realistically incorporating risk" in pipeline facility pricing and thus may be setting ROE's too high. On the other hand, siting challenges for a number of recently-proposed interstate oil and natural gas pipeline projects—such as the Keystone XL Pipeline, Constitution Pipeline, and Atlantic Coast Pipeline—suggest a possible increase in the cost of capital for pipelines due to regulatory risk and extended development timelines. The potential cost of complying with any future safety and environmental regulations (e.g., fugitive methane emissions) may also influence the cost of capital. FERC's NOI proceedings may attempt to address such issues, but it appears that the combination of rapidly changing capital market conditions and regulatory uncertainties have made ROE questions more complicated than they used to be and may continue to pose challenges for evaluating FERC's ratemaking policies going forward. These challenges could have implications for FERC-regulated pipeline rate revisions going forward and, consequently, for rebate policy when rates are reset.

Gas-Electric Interdependence

As the U.S. electric generation portfolio has shifted away from coal towards ever greater reliance upon natural-gas fired generation, the nation's pipeline system and electric power system have become increasingly interdependent. Indeed, in 2019, the head of the North American Electric Reliability Corporation testified before Congress that "the interdependence between natural gas and the electric sector has become fundamental now to the reliability of the [electric power] system."⁵⁸ In response to this growing gas-electric relationship—which varies across the regional power markets—in 2015, FERC issued Order 809 "to better coordinate the scheduling of wholesale natural gas and electricity markets in

⁵⁵ *Emera Maine v. FERC*, 854 F.3d 9 (D.C. Cir. 2017).

⁵⁶ FERC, "Inquiry Regarding the Commission's Policy for Determining Return on Equity," 84 *Federal Register* 11769, March 28, 2019.

⁵⁷ *Id.*

⁵⁸ James Robb, President and Chief Executive Officer, North American Electric Reliability Corporation, Testimony before the Senate Committee on Energy and Natural Resources, Hearing to Consider the Status and Outlook for Cybersecurity Efforts in the Energy Industry, February 14, 2019.

light of increased reliance on natural gas for electric generation.”⁵⁹ Concurrent with the order, FERC Commissioner Cheryl LaFleur stated “beyond national issues such as scheduling, regional efforts should continue to address aspects of gas/electric coordination, particularly fuel assurance in competitive electric markets that are heavily or increasingly dependent on natural gas.”⁶⁰

Commissioner LaFleur’s statement accompanying Order 809 raises questions about the implications of gas-electric interdependence on interstate natural gas pipeline investment. For example, would the supply of fuel from a proposed (or expanded) natural gas pipeline be so critical to a region’s electric reliability that it could warrant special treatment of its ROE? In electric ratemaking, FERC is authorized to approve “incentive rates” for key electric transmission projects under the Energy Policy Act of 2005 (§ 1241).⁶¹ Would similar concepts apply to certain pipeline projects where electric reliability (or other factors) could be affected? If so, how might such concepts be incorporated into rates?

Potential Refund Structures

Setting aside the fundamental question of whether some kind of rate refunds *should* be authorized in the pipeline sector, as they are in the electric power sector, it is unclear on what basis such refunds might be structured. The economic and operational characteristics of pipelines and transmission lines are quite different, so the rebate process and structure of the latter might not be appropriate for the former. For example, does a 15-month window for rebates, as specified under the Federal Power Act for electric transmission, make sense for pipelines?⁶² If Congress were to mandate pipeline rate refunds, FERC would need to go through a rulemaking process to implement them. The rulemaking would have to address such structural issues. Oversight of this process, both its timing and outcomes, might be an ongoing challenge for Congress.

⁵⁹ FERC, *Coordination of the Scheduling Processes of Interstate Natural Gas Pipelines and Public Utilities*, Docket No. RM14-2-000, Order No. 809, April 16, 2015.

⁶⁰ Cheryl LaFleur, FERC, “Statement of Commissioner Cheryl A. LaFleur on Gas-Electric Coordination,” Docket No. RM14-2-000, April 16, 2015.

⁶¹ FERC implemented these statutory provisions in Order 679 (July 20, 2006) and Order 679-A (December 22, 2006).

⁶² Federal Power Act § 206(b), 16 U.S.C. § 824e(b) (2006).
