

**UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION**

Coordination between Natural Gas and
Electricity Markets

)
)

Docket No. AD12-12-000

**POST-TECHNICAL CONFERENCE COMMENTS OF
THE INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA**

Pursuant to the Federal Energy Regulatory Commission's (FERC or Commission) "Notice of Technical Conferences" (Notice)¹ on the coordination of natural gas and electricity markets, the Interstate Natural Gas Association of America (INGAA) submits the following post-technical conference comments. INGAA is a trade organization that advocates regulatory and legislative positions of importance to the natural gas pipeline industry in North America. INGAA is comprised of 25 members, representing the vast majority of major interstate natural gas transmission pipeline companies in the U.S. and comparable companies in Canada. INGAA's members operate approximately 200,000 miles of pipeline, and serve as an indispensable link between natural gas suppliers and consumers. INGAA members are committed to providing reliable transportation services to their diverse customers, without undue discrimination, and to maintaining a high level of customer service.

I. Introduction

INGAA appreciates the Commission's leadership in bringing together stakeholders to discuss the opportunities and challenges associated with the increased use of natural gas for electric power generation. The Commission's five roundtable technical conferences provided an opportunity to share ideas and to discuss issues concerning gas-electric scheduling and market

¹ *Coordination between Natural Gas and Electricity Markets*, Notice of Technical Conferences, Docket No. AD12-12 (July 5, 2012).

structures, communications, coordination and information sharing, and reliability. As is well-recognized, the use of natural gas for electricity generation is increasing for a variety of reasons including the low cost of natural gas, abundant domestic supplies, and the impending retirement of some of the nation's coal-fired generation facilities.²

The conferences confirmed that parties' concerns vary by region due to a variety of factors, including: the generation mix within a region and the percentage of generation fueled by natural gas; the amount of coal-fired generation anticipated to retire; the amount of available unsubscribed pipeline capacity; and the electric market structure within that region.

Some regions, such as New England, face immediate electric reliability challenges due to pipeline capacity constraints and an electric market that currently does not incent or compensate generators for holding firm fuel supply, including natural gas, fuel oil, or dual fuel capability. Other regions, such as the area served by the Midwest Independent System Operator (MISO), may not face the immediate electric reliability concerns of the northeast, but very well could in the not-too-distant future depending on the timing and scale of coal-fired generation retirement, among other factors. Yet other regions, such as the southeast, do not seem to have electric reliability concerns in connection with greater utilization of gas-fired generation given the integrated nature of utilities in that region and their ability to recover the costs of firm

² *Annual Energy Outlook 2012*, Energy Information Administration (June 25, 2012), Figure 94, *Electricity generation by fuel, 2010, 2020, and 2035*. EIA projects that electric generation from natural gas will increase by 42 percent from 2010 to 2035, and its share of total generation will increase from 24 percent in 2010 to 28 percent in 2035. EIA further states that “[t]he relatively low cost of natural gas makes the dispatching of existing natural gas plants more competitive with coal plants and, in combination with relatively low capital costs, makes natural gas the primary choice to fuel new generation capacity.” *Potential Coal Plant Retirements: 2012 Update*, The Brattle Group (October 2012). “We find that 59 GW to 77 GW (for lenient versus strict scenarios, respectively) of coal plant capacity are likely to retire instead of retrofit with environmental equipment. These retirements occur absent any future regulations restricting carbon emissions.” Moody's Investor Service, July 2012 report. Moody's stated that between 2012 and 2017, approximately 52 gigawatts of new gas-fired capacity has the potential to create 5.2 Bcf/d of incremental natural gas demand. This would represent a 25 percent increase in power sector natural gas consumption compared to 2011.

transportation from ratepayers. These conferences confirmed that such differences significantly affect a region's concern, or lack thereof, about gas-electric integration issues. Moreover, the conferences reaffirmed that a "one-size-fits-all" solution to gas-electric reliability should not apply nationwide.

Nonetheless, we heard several common messages across regions:

- (1) Gas-fired generation will increase;
- (2) The issue is how to ensure electric reliability; this is not about the reliability of natural gas as a fuel source;
- (3) Electric market rules in restructured markets do not price power in a way that reflects the cost of ensuring electric reliability by enabling generators, regardless of fuel choice, to recover costs associated with firming up their fuel supply;
- (4) By contrast, generators within integrated electric utilities are able to price electric reliability into their power costs and thus secure a portfolio of transportation services including firm natural gas transportation and storage services, when necessary, to ensure electric reliability. The generators within integrated utilities also are able to support any necessary gas pipeline infrastructure development because those utilities can recover the cost of such prudent expenses from ratepayers; and
- (5) The FERC model for building interstate pipelines works well.

We continue to believe that strong FERC leadership and guidance, in conjunction with the state commissions, Planning Authorities and the North American Electric Reliability Corporation (NERC), where appropriate, is necessary to ensure that each region addresses how it will ensure electric reliability. In addition, continued FERC leadership can ensure that all stakeholders, including natural gas pipelines, have a seat at the table to evaluate and monitor any proposed solutions to identified issues.

II. The electric industry needs to factor the cost of electric reliability into its pricing structure.

INGAA recognizes that several ISOs, Regional Transmission Organizations (RTOs) and regulators are studying the adequacy of pipeline capacity in their regions.³ INGAA applauds these organizations for their efforts to analyze the fuel delivery infrastructure needed to ensure electric reliability in their regions as a precursor to taking the steps that may be needed to achieve this result.

Pipelines agree that each RTO/ISO in wholesale electric markets or each electric utility in bilateral markets, in conjunction with FERC, state commissions, Planning Authorities, and NERC, as appropriate, is in the best position to determine, in aggregate, the fuel and transportation choices available in its region (or service territory) and the level of firm backup power needed to ensure electric reliability.

It is not the role, nor the competence of, the pipeline industry to opine on the level of natural gas supply, transportation and storage capacity for which the generators within each region should contract in order to ensure electric reliability. Regardless of the resources a region wishes to rely upon for electric reliability, the RTO/ISO, electric utility, or other appropriate agencies and regulators, must ensure that generators in its region (or service territory) have contracted adequately to ensure that the appropriate amount of fuel will be available when

³ See, e.g., *2011 Special Reliability Assessment: A Primer of the Natural Gas and Electric Power Interdependency in the United States*, North American Electric Reliability Corporation (December 2011); *Gas and Electric Infrastructure Interdependency Analysis*, prepared for The Midwest Independent Transmission Operator by EnVision Energy Solutions (February 22, 2012); *Gas Curtailment Risk Study*, prepared for The Electric Reliability Council of Texas by Black & Veatch (March 2012); *Embedded Natural Gas-Fired Electric Power Generation Infrastructure Analysis: An Analysis of Daily Pipeline Capacity Availability*, prepared for The Midwest Independent Transmission Operator by EnVision Energy Solutions (May 30, 2012); *ISO Discussion Paper: Aligning Markets and Planning*, ISO New England (June 13, 2012); *Assessment of New England's Natural Gas Pipeline Capacity to Satisfy Short and Near-Term Electric Generation Needs*, prepared by ICF International for ISO New England Inc. (June 15, 2012); and *Addressing Gas Dependence: Draft—For Discussion*, ISO New England (July 2012).

needed.⁴ As part of this analysis, INGAA submits that the electric industry must account for the appropriate costs to achieve the desired level of electric reliability regardless of the electric reliability compliance strategy it chooses. It must properly incent adequate procurement of fuels, generating capability and technologies as well as market response mechanisms. INGAA is not commenting here on the merits of organized versus bilateral electric markets. Yet, INGAA observed at the technical conferences that electric utilities in bilateral markets are able to acquire a portfolio of firm and interruptible natural gas transportation services, and support pipeline expansions, because those utilities can recover the costs of such expenses from ratepayers in their state-regulated rates. The ability of integrated electric utilities to contract for existing and incremental capacity to meet electric reliability illustrates clearly that it is not the gas infrastructure model or the reliability of the natural gas system that prevents generators from signing up for pipeline capacity. Rather, whether a generator has the practical ability to contract for an appropriate level of firm transportation services appears to depend heavily on whether wholesale electric market rules price these costs into electric power rates.

As the Commission reviews issues it can address in the near-term, INGAA urges FERC not to lose sight of the more challenging, yet crucial, longer-term issues such as ensuring that wholesale power markets assign appropriate costs to achieve desired levels of electric reliability. No matter what market structure or fuel type a region employs, the electric industry needs to factor electric reliability into the electric pricing structure.

⁴ Or in the case of a bilateral market, the electric utility makes this determination. This decision is subject to a prudence review by its state regulator.

III. The Commission should not alter its proven regulatory model that underpins the construction of natural gas pipeline infrastructure.

Pipeline customers and other stakeholders at the technical conferences agreed that the FERC model for certifying pipeline infrastructure works well,⁵ and pipelines have a proven history of building infrastructure in response to market demand. In fact, the FERC certificated almost 7,800 miles of interstate pipeline in the past five years.⁶

An important element of FERC's successful model for building pipeline infrastructure is the Commission's incremental rate policy, which has facilitated pipeline expansions by helping customers avoid, or at least minimize, many contentious cost-allocation and cross-subsidization issues that can delay a project's regulatory approval. Several customers at the technical conferences commented that they would oppose strongly attempts to change the FERC incremental rate policy or any changes that would result in all customers subsidizing expansions that primarily benefit generators.⁷ In addition, FERC's requirement that pipelines solicit from shippers any potential turn-back capacity in conjunction with expansion projects,⁸ and pipe-on-pipe competition to serve market demand, ensure projects are sized properly and that only needed interstate pipeline capacity is built.⁹

⁵ This regulatory model is premised upon a demonstration of market need, as evidenced through long-term shipper contractual commitments.

⁶ Richard Foley presentation at slide 3.

⁷ See, e.g., oral comments of David Ciarlone of Alcoa at the FERC technical conferences in Docket No. AD12-12.

⁸ FERC requires a pipeline proposing to expand its system to hold an open season and solicit offers from existing shippers offers to permanently turn back or release unneeded capacity. *Pricing Policy for New and Existing Facilities Constructed by Interstate Natural Gas Pipelines*, 71 FERC ¶ 61,241 (1995); *reh'g denied*, 75 FERC ¶ 61,105 (1996).

⁹ *Pine Prairie Energy Center, LLC*, Order on Rehearing and Compliance Filing, 137 FERC ¶ 61,060 at Par. 25 (2011). "The Commission, however, continues to require capacity turn-back open seasons ... that work to ensure projects proposed to and authorized by the Commission are truly in the public convenience and necessity. These include promoting the proper sizing of new facilities and mitigating the potential for overbuilding, the avoidance of unnecessary disruption of the environment, and the unneeded exercise of eminent domain" (*citing Certification of New Interstate Natural Gas Pipeline Facilities*, Statement of Policy, 88 FERC ¶ 61,227 at 61,737 (1999)).

At the New England technical conference, one participant suggested that an Order 1000-type joint infrastructure planning process for both the electric and gas industries would be helpful in ensuring the adequacy of pipeline capacity to serve both electric generators and the pipelines' historic customers. INGAA cautioned that a process under which some authority picks winners and losers by determining where and how much pipeline infrastructure should be built in a region would contradict FERC's proven model for certifying natural gas pipelines. The gas pipeline model works well; adopting the electric model for pipeline infrastructure development is neither needed nor desired. Neither the pipeline nor its anchor shippers have an incentive to overbuild or leave existing capacity underutilized.

While the current regulatory and legal framework for pipeline construction works well, pipelines recognize that capacity cannot be added overnight. If an existing customer, whether it is an industrial consumer, electric generator, producer or local distribution company (LDC), anticipates a change to its future demand for natural gas, that customer should talk with its pipeline provider about capacity and service needs as soon as feasible. The pipeline then will determine the options available to the customer and, to the extent additional infrastructure is necessary, advise the customer of the long-term transportation contracts and services that will be needed to support the incremental expansions of the pipeline system needed to serve them. Since it takes several years to plan, site and construct a generation plant, INGAA is confident that if the customer works with the pipeline and outlines and contracts for its future pipeline capacity needs early in the process, the necessary pipeline infrastructure will be available in time to meet future demand.

IV. Pipelines have demand response; it's called capacity release.

Some participants at the technical conferences suggested that electric generators could be served more efficiently if the rules governing the pipeline industry provided for natural gas demand response. The natural gas industry already has a functioning demand response mechanism in the form of its robust capacity release market.

Further, asset managers today manage a portfolio of customers' contracts and release packages of capacity to serve generators. These asset managers are able to meet many of the generators' needs without additional changes to the current capacity release program.¹⁰ It is telling that, notwithstanding the discussion of this topic at the technical conferences, asset managers have not suggested that further improvements are needed to the capacity release rules in order for them to package services for generators and permit greater responsiveness to the market.

Capacity release alone, however, cannot provide enough pipeline capacity to accommodate the demand expected as the result of additional gas-fired generation in certain regions with constrained pipeline capacity. As noted by NERC in its December 2011 report, *A Primer of the Natural Gas and Electric Power Interdependency in the United States*, a mid-size

¹⁰ As the Commission recognized in Order No. 712, in revising its capacity release program to allow AMAs to participate more efficiently in the capacity release market by removing the tying restrictions and exempting releases to AMAs from competitive bidding requirements:

AMAs provide significant benefits to a variety of participants in the natural gas and electric marketplaces and to the secondary natural gas market itself. . . . By permitting capacity holders to use third party experts to manage their gas supply arrangements and their pipeline capacity, AMAs provide for lower gas supply costs and more efficient use of the pipeline grid. Asset managers have resources and market knowledge not necessarily available to natural gas capacity holders ... which allow asset managers to better maximize the value of the releasing party's assets and manage the associated risk.

See Promotion of a More Efficient Capacity Release Market, Final Rule, Order No. 712, 123 FERC ¶ 61,286 at Par. 122 (2008).

generator is the size of a midsize LDC. For example, a 1,370 MW cogeneration plant has roughly the same peak daily equivalent of gas as Boston Gas or Washington Natural Gas in Seattle. A typical 500 MW combined cycle unit has roughly the same peak daily equivalent of gas as Providence Gas or San Antonio City Public Service.¹¹ During coincident peak periods, it is unrealistic to believe that a distributor, with obligations to serve its residential and commercial space heating customers, would release all or most of its capacity to a generator. On the coldest days in these regions, even the most robust capacity release market with considerable intraday flexibility would not be a reliable resource for a generator that is expected to serve load since the shippers from whom it received released capacity in the summer now would need to use their own firm contract rights to serve their customers. Given the magnitude of the demand represented by a generator, it would be difficult for even a consortium of midsize LDCs – or other firm shippers – to release enough capacity on a peak day to serve even a single generator.

Furthermore, to be effective, a releasing shipper must be situated on the pipeline close enough to the replacement generator for the release to meet the generator’s needs. This will not always be the case, especially when shippers are utilizing their capacity fully along the primary paths that they have contracted (i.e., peak demand periods).

Regardless of the robustness of the capacity release market and its ability to reallocate capacity to those that value it most, capacity release is not a fully satisfactory solution for electric generators that will be depended upon to support the reliability of the bulk power system. Capacity release is a quasi-firm service, particularly if the replacement shipper wants to use the released capacity at secondary points or if the weather-sensitive releasing shipper has placed

¹¹ *2011 Special Reliability Assessment: A Primer of the Natural Gas and Electric Power Interdependency in the United States*, North American Electric Reliability Corporation (December 2011), Figure 7-1: *Comparison of LDC, Power Plant Loads and Pipeline Capabilities* at 85.

recall rights on its release. Interruptible pipeline transportation and capacity release volumes are a secondary market services that, while providing value for shippers during certain periods, do not guarantee supply during peak periods when primary shippers need their capacity. The capacity release market has worked as the Commission intended – facilitating the resale of temporarily available capacity. Changes to the capacity release rules, however, will not change the nature of that capacity for a generator or any other holder of released capacity; it still will be less than truly firm.

V. Conclusion

While the regional technical conferences demonstrated regional differences and affirmed the conclusion that a “one-size-fits-all solution” should not apply, there were common themes that weaved through all the conferences.

Respectfully submitted,



Joan Dreskin
General Counsel
Interstate Natural Gas Association
of America
20 F Street, NW
Suite 450
Washington, DC 20001
202-216-6928
Jdreskin@ingaa.org

DATE: November 13, 2012