

**BEFORE THE  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C.**

Carbon Pollution Emission Guidelines      Docket No. EPA-HQ-OAR-2013-0602  
for Existing Stationary Sources:  
Electric Utility Generating Units

**COMMENTS OF  
THE INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA**

December 1, 2014



The Interstate Natural Gas Association of America (INGAA) submits these comments in response to the Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Generating Units (Clean Power Plan) proposed by the United States Environmental Protection Agency (EPA) in June 2014.<sup>1</sup>

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 the interstate natural gas transmission pipeline companies in the United States and comparable companies in Canada. INGAA's members, which operate approximately 200,000 miles of pipelines, provide an indispensable link between natural gas producers and natural gas consumers in the residential, commercial, industrial and electric power sectors. INGAA's members are committed to providing safe and reliable transportation services to their diverse customers, without undue discrimination, and to maintaining a high level of customer service.

Interstate natural gas transmission pipelines are subject to a variety of EPA regulations and reporting requirements for both conventional air emissions and Greenhouse Gas Emissions. While the Clean Power Plan does not propose to regulate interstate natural gas transmission pipelines, INGAA wishes to comment regarding the role that its members will play in transporting the natural gas that would be used to increase the utilization of natural gas combined cycle (NGCC) generating units, one of the four "building blocks" that EPA identifies as a best system for emissions reduction for achieving compliance with the proposed rule.

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<sup>1</sup> *Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units*, 79 Fed. Reg. 34829 (June 18, 2014) (Clean Power Plan).

## **Executive Summary**

INGAA is confident that, subject to certain caveats and assuming that certain preconditions can be satisfied, the interstate natural gas pipeline industry can respond to demand for the natural gas pipeline capacity that may be necessary to enable compliance with the Clean Power Rule. These caveats and preconditions include the following:

1. While the interstate natural gas pipeline industry has a proven track record of building natural gas infrastructure in response to market demand, new pipeline capacity cannot be added overnight. On average, it takes three years to develop a new interstate pipeline. State implementation plans must allow sufficient time to (1) identify where incremental pipeline capacity will be needed, (2) ensure that a creditworthy entity has the ability to contract for long-term firm pipeline service (i.e., cost recovery), and (3) site, permit and construct the new facilities.
2. Interstate natural gas pipelines are developed competitively in response to market demand that manifests itself in the willingness of shippers to commit to long-term contracts for firm pipeline service. New pipeline capacity that may be needed in order for generators to comply with the Clean Power Plan will be developed only if creditworthy entities are willing and able to contract for firm pipeline service on a long-term basis.
3. While it is likely that pipeline capacity will be available in the secondary market to deliver the natural gas that will be needed to increase the utilization of NGCCs, INGAA cautions against relying solely on nationwide summary statistics and past performance to draw definitive conclusions about the availability of pipeline capacity.

## **Background: EPA's Conclusions Regarding the Natural Gas Delivery System**

EPA states three principal reasons supporting its conclusion that the natural gas delivery system (i.e., natural gas transmission pipelines) will be capable of supporting the degree of increased NGCC utilization needed for the states to achieve the goals proposed in the Clean Power Plan:

1. The natural gas pipeline system is already supporting national average NGCC utilization rates of 60 percent or higher during peak hours, which are the hours when constraints on pipelines are most likely to arise.
2. The flexibility of the emission guidelines means that even if isolated natural gas system constraints were to limit NGCC unit utilization in certain locations at certain hours, this would not prevent an increase in NGCC generation across a state or across a broader region in all hours.
3. Pipeline planners have repeatedly demonstrated the ability to relieve constraints and expand capacity methodically.<sup>2</sup>

In support of this final reason, EPA cites statistics documenting pipeline capacity expansions that have occurred within the last decade, pipeline projects scheduled for completion within the next two years, and forecasts expressing confidence in the ability to expand pipeline infrastructure significantly to meet growth in demand. In addition, EPA points to the flexible nature of the proposed goals of the Clean Power Plan as providing the time necessary for infrastructure improvements that may be necessary in some locations.

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<sup>2</sup> Note that in its recitation of the second and third reasons, EPA makes the same statements with respect to electric system infrastructure. As noted, INGAA will not address EPA's analysis of the capability of the electric transmission system to accommodate shifting load patterns attributable to implementation of the Clean Power Plan.

## **Scope of INGAA's Comments**

INGAA will confine its comments to EPA's conclusion that the natural gas delivery system would be capable of supporting the degree of increased NGCC utilization needed for states to achieve the goals proposed in the Clean Power Plan. INGAA will not comment on the portions of that analysis directed to natural gas supply and to the capability of the electric transmission system to accommodate shifting generation patterns. Neither will INGAA comment on the merits of the Clean Power Plan itself nor on any other part of the analysis offered by EPA in support of the proposed plan.

## **INGAA's Comments**

INGAA appreciates EPA's recognition of the pipeline industry's proven track record of building natural gas infrastructure in response to market demand. INGAA is confident that, subject to certain caveats and assuming that certain preconditions can be satisfied, the interstate natural gas pipeline industry can respond to demand for the natural gas pipeline capacity that may be necessary to enable compliance with the Clean Power Rule.

## **Availability of Existing Pipeline Capacity**

As noted by EPA, the flexibility of the proposed emission guidelines increases the likelihood that the need for new pipeline infrastructure to enable compliance with the rule can be mitigated to some degree. In particular, if as EPA assumes, the increased utilization of NGCCs needed for the states to achieve the proposed goals could be accomplished without increasing such units' utilization rates during peak hours, then it is likely that significant compliance can be achieved via increased utilization of existing natural gas infrastructure.

Natural gas local distribution companies (LDCs) have been the historic anchor shippers on interstate natural gas pipelines. Consequently, pipelines in many cases have been designed to

deliver sufficient natural gas to meet the LDCs' peak day winter heating loads. For much of the year, however, some portion of the LDCs' entitlement to firm service<sup>3</sup> is underutilized and this pipeline capacity can be re-sold by the LDC in a secondary market for pipeline capacity.

Electric generators already rely significantly on pipeline capacity acquired in the secondary market for the delivery of natural gas. This is particularly true for merchant generators in the organized wholesale power markets (i.e., the markets administered by Regional Transmission Organizations or Independent System Operators). Hence, during off-peak months when pipeline capacity is unlikely to be utilized fully by firm pipeline shippers, it is likely that pipeline capacity will be available in the secondary market to deliver the natural gas that will be needed to increase the utilization of NGCCs.

Furthermore, the shift in natural gas pipeline flows attributable to the shale gas revolution may create additional underutilized pipeline capacity that could be used to serve gas-fired generators operating at increased capacity factors. In some cases, the abundance of natural gas and the shift in the location of natural gas relative to consuming markets has resulted in diminished capacity utilization along some pipeline corridors. This creates additional pipeline capacity that could be used to support natural gas-fired generators in proximity to such pipelines. Conversely, because the flow of natural gas has increased along other pipeline corridors, there will be less underutilized pipeline capacity available along those corridors to support the increased utilization of NGCCs. For example, the initiation of liquefied natural gas exports and the demand for natural gas to supply new and re-opened petrochemical facilities along the Gulf of Mexico will result in greater year-round utilization of existing pipeline capacity in that region.

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<sup>3</sup> Firm transportation (FT) service is given the highest priority on a pipeline and generally is not subject to reduction or interruption. Customers typically contract for FT service on a long-term basis and pay monthly reservation (or demand) charges to reserve space on the pipeline, regardless of whether or not they use the space during the month.

This last point highlights the limits of relying on nationwide summary statistics and past performance to draw conclusions about the ability to support the increased utilization of NGCCs with underutilized pipeline capacity. A more intensive examination of regional natural gas markets and anticipated changes in pipeline flows over the course of implementation of the Clean Power Plan would be necessary to analyze the amount of off-peak pipeline capacity that actually would be available to support the increased utilization of NGCCs. Furthermore, this also should include an examination of pipeline connections with individual generators, because generators might be affected by localized capacity constraints and utilization patterns even if capacity was available on the broader regional level.<sup>4</sup> For example, the Energy Information Administration regularly examines changes in inter-regional pipeline capacity (i.e., the ability to transport natural gas between regions). This, however, does not include an examination of the availability of capacity within a region to serve a particular pipeline delivery point.

In addition, while there is less demand for interstate natural gas pipeline capacity during off-peak months, pipeline operators typically schedule maintenance during these periods in order to minimize the effect on firm transportation customers (which, as noted above, typically are natural gas LDCs). Consequently, the amount of available pipeline capacity may be reduced because the pipeline operator has temporarily withdrawn facilities from service to perform maintenance. While pipeline operators are careful not to affect the ability to meet the needs of firm shippers when maintenance is being performed, the capacity available for interruptible shippers<sup>5</sup> may be limited.

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<sup>4</sup> In addition, some gas-fired generators are not served directly by interstate natural gas pipelines but rather are served by natural gas LDCs. In these cases, capacity constraints within such LDCs' systems would be relevant.

<sup>5</sup> Interruptible transportation (IT) service has a lower priority for scheduling than FT service and is not available if pipeline capacity is needed for firm service. In connection with this, it is important to note that natural gas transmission pipelines typically are not designed with any excess or "reserve" capacity. Pipelines are designed to fulfill the maximum contractual delivery obligations to FT customers. IT shippers are served with what may be available when FT shippers do not fully utilize their entitlement to service.

Finally, it is important to note that under the open access requirements prescribed by the Federal Energy Regulatory Commission (FERC), interstate natural gas pipeline capacity must be available on a not unduly discriminatory basis. Priority for access to pipeline capacity is dictated by the quality of service that a shipper chooses to subscribe (e.g., firm transportation versus interruptible transportation).<sup>6</sup> The end use for the natural gas transported is not a factor in prioritizing access to pipeline capacity. Hence, the fact that a shipper wishes to transport natural gas to an NGCC for purposes of compliance with the Clean Power Plan would not cause its transportation to take priority over another shipper wishing to transport natural gas, to be used for some other purpose, if that other shipper subscribed to higher priority pipeline service.

### **Additional Pipeline Capacity**

Should additional pipeline capacity be needed to support compliance with the Clean Power Plan, INGAA is confident that the industry will be able to respond to this demand. Still, the ability to respond in a timely manner depends on several factors:

First, pipeline companies do not build new pipelines or add capacity to existing pipelines based on speculation or any pre-determined schedule or master plan. Pipelines are built and capacity is added when creditworthy shippers commit to long-term (e.g., 15-year) contracts for firm transportation service.

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<sup>6</sup> While firm versus interruptible transportation service is offered as the example, there are additional rules for prioritizing access to pipeline capacity, such as whether primary versus secondary receipt and delivery points will be utilized, etc.



In connection with this point, and in order to ensure that there is no confusion regarding the process for developing new pipeline capacity, INGAA wishes to provide some context and clarification to a statement in EPA's analysis. EPA states:

The third consideration supporting the conclusion regarding the adequacy of the infrastructure is that *pipeline* and transmission *planners* have repeatedly demonstrated the ability to methodically relieve bottlenecks and expand pipeline capacity. Natural gas pipeline capacity has been regularly added in response to increased gas demand and supply, such as the large amounts of new NGCC capacity from 2001 to 2003, or the delivery to market of unconventional gas supplies since 2008.<sup>7</sup> (emphasis added)

While EPA refers to "pipeline planners," it should be understood that, unlike electric transmission lines, interstate natural gas pipelines are not "planned" in a centralized manner or on a regional basis. Pipelines are developed competitively in response to the market demand that manifests itself in the willingness of shippers to commit to long-term contracts for firm pipeline service. Often more than one pipeline competes for a market opportunity. It is the market that determines the winners in this competition, i.e., which of the competing proposals receives sufficient shipper commitments enabling it to proceed. While pipeline developers are aware of forecasted increases in supply and demand, this alone is not the basis for proceeding with a pipeline project, i.e., pipelines are not built on speculation. Consequently, while the development of unconventional natural gas supplies spurred demand for additional pipeline capacity, those pipelines were not developed until shippers (typically natural gas producers or natural gas marketers) contracted for the capacity to transport their supply to the market. Similarly, while the addition of new NGCC capacity created additional demand for pipeline capacity, pipelines were not developed until shippers committed to long-term firm contracts for the pipeline capacity that would be used to satisfy that demand. In fact, developing pipeline

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<sup>7</sup> 79 Fed. Reg. 34829, 34864 (footnote omitted).

capacity to serve the demand created by NGCCs in organized wholesale power markets (and, in particular, the markets in which generation has been divested by incumbent utilities) has been problematic. Rules in those markets create little incentive or ability for merchant generators to contract for firm pipeline capacity.<sup>8</sup> This is an important point in connection with satisfying the need for new interstate natural gas pipeline capacity that may be created by implementation of the Clean Power Plan. Second, the legal and regulatory process for siting and permitting new pipelines and adding capacity on existing pipelines is a very complex multi-year process. The time between the inception of a pipeline project and an in-service pipeline historically has averaged about three years. This can vary greatly depending on the size and complexity of the project and issues encountered in the permitting process. On the one hand, it can be significantly shorter if mainline pipeline capacity is available and only a lateral pipeline is needed to connect the new customer. On the other hand, the process can be significantly longer if the proposed routing of the pipeline is contested or if it is difficult to obtain necessary permits.

Recent experience, however, indicates that the pipeline siting and permitting process is becoming more challenging and continued performance at this rate should not be taken for granted. This too is an important point in connection with satisfying the need for new pipeline capacity that may be needed to support the increased utilization of NGCCs as part of meeting the targets under the Clean Power Plan. That is, state implementation plans must allow sufficient time to (1) identify the instances in which incremental pipeline capacity will be needed, (2) ensure that a creditworthy entity has the ability to contract for long-term, firm pipeline service (i.e., ensure cost recovery in that entity's rates, if it is a regulated utility, or by other means if it is not), and (3) site, permit and construct the needed facilities. While pipeline operators can work

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<sup>8</sup> The pipeline expansions within these organized wholesale power markets have been supported by natural gas LDCs and natural gas producers as the "anchor" FT shippers, not electric generators.

with generators and with state authorities to explore some of these questions prior to the finalization of state implementation plans, actual commitments by shippers to subscribe firm pipeline capacity and by pipelines to develop new facilities are unlikely to occur until it is certain what will be required pursuant to a state implementation plan.

The legal and regulatory process for developing new interstate natural gas pipeline capacity can be very complex, and there are opportunities for incremental improvements that would make it more efficient and more predictable. The part of this process with perhaps the greatest potential for improvement is the permitting that must occur in conjunction with the certificate of public convenience and necessity issued by FERC pursuant to the Natural Gas Act. These permits ensure compliance with other federal resource and environmental laws, and in some cases the permits are issued by state agencies acting pursuant to delegated federal authority. Delays in processing and issuing these permits can add significantly to the time needed to construct a pipeline project. Endangered Species Act compliance and implementation of the Migratory Bird Treaty Act are two examples. EPA should be mindful of how regulations and associated permitting requirements within the scope of its authority will affect the ability to add the natural gas pipeline infrastructure that will facilitate compliance with the Clean Power Plan.

EPA should support the Obama Administration in its efforts to improve the efficiency of the federal permitting process for infrastructure that contributes to economic growth and the achievement of other public policy objectives. Interstate natural gas pipelines fit squarely within this category. In addition, the administration should work constructively with the Congress on statutory reforms that will make it possible to increase the efficiency and predictability of pipeline permitting. Conversely, any deterioration in the efficiency of this process at the federal

and state levels will impair the ability to add pipeline capacity in a timely manner. This, in turn, will frustrate implementation of the Clean Power Plan by creating uncertainty about the ability to add pipeline capacity in a timely and predictable manner and thereby support the increased utilization of NGCCs.

## **Conclusion**

INGAA is confident that the natural gas pipeline industry can respond to demand for the natural gas pipeline capacity that may be necessary to enable compliance with the Clean Power Rule, subject to the following caveats and preconditions: (1) sufficient time (i.e., three or more years) must be allowed to plan and construct new natural gas pipeline infrastructure to support this increased demand for natural gas; (2) the need for creditworthy entities to make the contractual commitments for firm natural gas pipeline service; and (3) caution against drawing definitive conclusions about the availability of pipeline capacity based on nationwide summary statistics and past performance.

Respectfully submitted,



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