



June 23, 2016

The Honorable Lisa Murkowski
Chairman
Committee on Energy and Natural Resources
United States Senate
304 Senate Dirksen Office Building
Washington, DC 20510

Dear Chairman Murkowski:

On behalf of the Interstate Natural Gas Association of America (INGAA), I would like to thank you for convening the June 14, 2016 oversight hearing on oil and natural gas pipeline infrastructure. INGAA appreciates your recognition of the importance of pipeline infrastructure to fulfilling the principles that are at the heart of your *Energy 20/20* blueprint. INGAA asks that this letter be included in the record of the committee's oversight hearing on pipeline infrastructure.

INGAA represents natural gas transmission pipeline operators in the United States and Canada. The pipeline systems operated by INGAA's 24 member companies are analogous to the interstate highway system, transporting natural gas across state and regional boundaries.

The United States' network of more than 300,000 miles of natural gas transmission pipelines is the envy of the world. This pipeline system is integrated with the Canadian interprovincial pipeline system and increasingly with cross-border markets in Mexico. The connections provided by natural gas transmission pipelines enable American consumers to enjoy the benefits of the world's most robust and competitive natural gas market and the supply abundance created by the shale revolution.

The regulatory model created by the Federal Energy Regulatory Commission (FERC) pursuant to the Natural Gas Act made this possible. The United States would be unable to capture these benefits fully without non-discriminatory open access to pipeline transportation and the ability to construct pipeline and storage infrastructure in response to market demand. Both have resulted from FERC's policies.

INGAA welcomes constructive input on how pipeline transportation services and pipeline infrastructure can be made more efficient and market responsive. The testimony of Mr. Jonathan Peress of the Environmental Defense Fund (EDF) addressed what he characterized as "opportunities to update natural gas wholesale market rules to better align with contemporary supply and demand dynamics, which in turn, will clarify the extent of need and commercial considerations attendant to new interstate natural gas pipeline capacity." While INGAA appreciates the spirit in which the EDF testimony was offered, it is important to correct several misleading and inaccurate statements that form the basis for its conclusions and recommendations.

Pipeline capacity utilization

The EDF testimony highlighted pipeline capacity utilization on a nationwide basis as indicative of opportunities to enhance the efficiency of the pipeline system. In support of this, EDF cites Department of Energy data indicating that capacity utilization of interstate natural gas pipelines averaged 54 percent between 1998 and 2013. This is a misleading statistic. Natural gas pipelines are designed to meet peak contractual demand and not annual average demands. Pipeline capacity that is unused in an off-peak period does not equate to additional pipeline capacity in a peak period.

By analogy, many highways are built to handle peak rush-hour demand; just because a highway is nearly empty at 2:00 a.m. is not indicative of the road capacity needed at rush hour. Likewise, a lightly traveled rural highway does not negate the need for more roads in a metropolitan area with daily traffic congestion.

Nationwide averages of natural gas capacity utilization are not indicative of the efficiency of the natural gas pipeline network. First, a significant part of the demand for natural gas in the United States is for residential and commercial space heating, which is seasonal. In order to serve incremental heating demand during winter months, local natural gas utilities rely on interstate pipeline capacity, along with underground storage and on-system peak shaving resources, to deliver the necessary gas supplies. Local gas utilities therefore contract for pipeline capacity with their legal obligation to serve residential and commercial customers on peak winter days in mind, not simply based on average annual system demand. Consequently, it is no surprise that local gas utilities do not fully utilize their contracted pipeline capacity on a year-round basis.

Furthermore, these seasonal patterns of utilization by local gas utilities provide the principal foundation for a vibrant secondary market for pipeline capacity. Local utilities “release” their unused pipeline capacity to the market where it is utilized by third parties, including electric generators and the intermediaries that supply natural gas to the generators. This promotes efficiency by putting the pipeline capacity in the hands of those who value it the most when it is unneeded by its primary holder.

In addition, pipeline capacity is not a fungible commodity that can be redeployed elsewhere when needed. For example, the fact that there is underutilized pipeline capacity along a corridor in the Midwest does nothing to relieve a capacity constraint in the Northeast. Pipeline flows change as our nation’s economy evolves and as supply and demand centers shift accordingly. For example, the massive shifts in supply and demand associated with the shale revolution, the increasing use of natural gas for electric generation and emergence of export markets for natural gas have caused significant shifts in pipeline flows. It is not surprising that there are some pipeline corridors that are experiencing declining utilization and others that are increasingly utilized to the point of needing expansion.

The EDF witness also asserted that natural gas pipeline capacity in the Northeast was not fully utilized during the polar vortex event of January 2014 and that this demonstrates a lack of efficiency in how pipelines are operated. EDF’s assertion is based on misunderstandings about how both shipper nominations and pipeline operations affect the pipeline capacity that might appear to be unused on any given day. For example, capacity might appear to be unused from a nomination standpoint, but in fact be dedicated to providing no-notice service that was not utilized by the customer on that day. Or the pipeline capacity might have been

used to provide a shipper with intra-day flexibility which was not reflected in the daily usage calculations. Or a shipper might have reduced its initial nomination or might have been unable find natural gas at its receipt point. In summary, it would take a very fact-intensive, pipeline-specific inquiry of a pipeline and all of its shippers to determine why pipeline capacity was not used on a particular day.

Comparisons to wholesale electricity markets

In his oral statement, the EDF witness suggested that the structure of wholesale natural gas markets is “comparatively dumb” relative to that of organized wholesale electricity markets. This blanket statement disregards material differences in the physics of natural gas and electricity, the economics and structure of the respective industries, and the applicable legal and regulatory frameworks. Such statements do little to promote an informed discussion of how to improve natural gas/electric power coordination.

Capacity versus deliverability

The EDF witness suggested that wholesale natural gas market design has not kept pace with the evolution of the United States energy market because interstate natural gas pipelines sell “capacity” and not “deliverability.” He suggests that pipelines be obligated to offer non-ratable, short-term deliveries of natural gas to electric generators and others, with such customers presumably being obligated to pay a market rate for such services only when and if the services are needed.

While EDF’s testimony provides little detail on this alternative construct for pipeline services, several points come to mind.

First, the secondary market for natural gas pipeline capacity already would appear to provide the short-term “deliverability” that the EDF witness stated is needed. Pursuant to FERC’s rules, firm pipeline shippers can release capacity to third parties on a short- or long-term basis, and such transactions that are a year or less in duration can be priced by the market. Third-party intermediaries can package pipeline capacity and natural gas supply to create services that meet the short-term needs of electric generators and other natural gas consumers.

Second, assuming the availability of pipeline capacity, interstate natural gas pipelines already provide customers with flexibility beyond that which they are obligated to provide under their FERC tariffs. In other words, when firm customers are not fully utilizing their contractual entitlement to pipeline capacity, pipeline operators can use the available capacity to provide customers with enhanced flexibility. Still, this flexibility can be offered on a firm basis only if adequate infrastructure is available to provide the service.

Third, pipeline deliverability cannot exist without pipeline capacity. In EDF’s model of a wholesale natural gas market designed on the basis of pipeline deliverability, who would be obligated to pay the fixed costs of the pipeline capacity needed to provide the desired level of pipeline deliverability? How would this fit with a model in which individual shippers have contracted with pipeline operators for firm pipeline capacity sufficient to meet their particular needs? Or is EDF proposing a fundamental restructuring of the economic model for

natural gas pipelines to resemble the model for electric transmission in which network costs are socialized across all users of the transmission network on a widespread regional basis?

Fourth, while EDF's testimony focused largely on the interface between natural gas pipeline services and gas-fired electric power generators, it is important to recognize that electric power generation represents only about one-third of the United States' end use market for natural gas. The other two thirds of the market are residential and commercial heating, and industrial natural gas consumers. Shippers representing these consuming sectors hold an even larger share of firm natural gas pipeline capacity because electric generators in many parts of the country hold little or no firm pipeline capacity. How would this restructuring affect these customers whose firm contracts have supported the expansion and maintenance of the existing pipeline network?

In sum, EDF's proposal raises many more questions than it answers. What is most worrisome is that this proposal would appear to discard the economic model that has made it possible for the United States to construct, operate and expand the natural gas pipeline and storage market that has supported the world's most competitive natural gas commodity market and enabled most consumers (save for those in pipeline-constrained markets such as New England) to reap the benefits of the shale revolution.

Establishing the need for new pipeline capacity and who pays for it

The shippers on interstate natural gas pipelines are as diverse as the multiple uses of natural gas. They include natural gas producers and marketers, industrial consumers, natural gas local distribution companies, electric utilities, merchant power generators, and now liquefied natural gas terminal operators. The common threads are that interstate natural gas pipelines are obligated to provide non-discriminatory open access to all shippers and that these shippers demonstrate market demand and enable new pipelines to be financed by entering long-term, firm contracts for pipeline capacity.

This model has worked remarkably well in facilitating timely, market-responsive expansion of the pipeline network and accountability on the part of pipeline companies and firm shippers, while at the same time avoiding protracted debates over cost allocation. FERC's policies supporting this model represent a significant improvement over the prior model in which the need for new pipeline capacity and the winners and losers in providing new pipeline service were determined by administrative litigation. The commercial market is much better at divining the need for a pipeline and for choosing between competing proposals than an administrative law judge choosing between competing lawyers. The "policy refinements" suggested by the EDF witness – "whereby FERC undertakes a more robust and detailed assessment of the extent and duration of market need for new interstate pipeline capacity" – would represent a return to that ineffective and discarded model.

In addition, the EDF witness suggested that it is bad policy for state regulators to approve utilities' choices to contract for pipeline capacity to meet the needs of their customers. He stated "[i]n the absence of a voluntary transaction between capacity developers and market participants risking their own capital, further capacity expansion would only occur in the event policymakers impose long-term financial obligations on captive ratepayers for costly long-lived infrastructure."

This is a remarkable statement. It expresses little confidence in state regulators' ability to make reasoned choices, based on the record that the retail ratepayers served by state-regulated utilities will or will not benefit from such long-term investments.

The EDF's witness' statement ignores the long history of state regulators making such choices with respect to the long-lived, capital intensive infrastructure investments that must be made in order to render safe, reliable and reasonably priced utility service. This is true for natural gas local distribution companies' (LDCs) proposals to build and replace distribution pipelines and contract for gas supply and interstate natural gas pipeline services. It also is true for franchised electric utilities' proposals to build distribution and transmission lines and generating stations, and to contract for fuel supply and purchased power.

State-regulated utilities play a critical role as aggregators of retail market demand for pipeline projects, and it is totally appropriate that retail customers reimburse LDCs or electric distribution companies (EDCs) for the costs of pipeline commitments. Customers are safeguarded by the requirement that a state public service commission approve such contracts entered by LDCs or EDCs. We reject the EDF witness' assertion that such commitments by regulated utilities are, by definition, uneconomic and injurious to competition.

There is an irony to the EDF witness' prescription, because the pipeline infrastructure that serves natural gas-fired generators in competitive wholesale power markets was developed in large part to meet the needs of state-regulated natural gas LDCs. During off-peak periods, LDCs sell their excess pipeline capacity into the secondary market, thereby enabling power generators to obtain pipeline capacity for which they have not otherwise contracted. Were it not for the states' decisions to authorize regulated LDCs to support the development of pipelines through long-term firm contracts, there would have been little or no pipeline capacity to enable natural gas-fired generators to emerge as a competitive force in wholesale power markets.

Thank you again for providing a forum highlighting the important role of energy pipelines in supporting our nation's economy and fulfilling our energy policy aspirations. INGAA welcomes a robust discussion about how to expand and optimize our natural gas pipeline infrastructure and the services offered by pipeline operators in response to our dynamic energy economy. Still, it is important that this discussion is grounded in the facts, with an appreciation for the operational and economic realities of building and operating pipelines and appreciation of the multiple interests that must be considered as we examine paths forward.

Respectfully,

A handwritten signature in blue ink, appearing to read "D. F. Santa", written in a cursive style.

Donald F. Santa

cc: The Honorable Maria Cantwell