



May 22, 2023

North American Energy Standards Board
1415 Louisiana Street, Suite 3460
Houston, TX 77002

Re: NAESB Recommendations to Improve the Reliability of Natural Gas Infrastructure
Supporting the Bulk Electric System. Via email naesb@naesb.org

To Whom It May Concern:

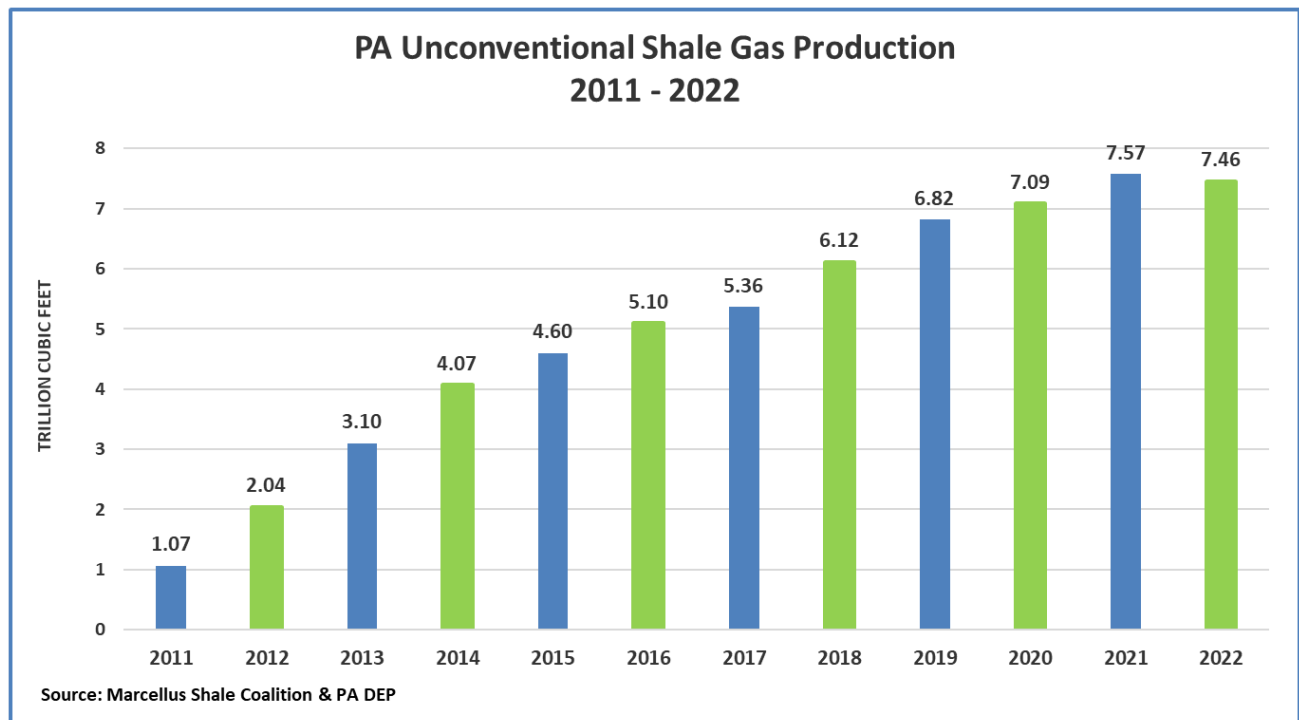
The Marcellus Shale Coalition (MSC), a regional trade association with a national membership, appreciates the opportunity to submit the following comments regarding the above-referenced solicitation for recommendations on improving the reliability of natural gas infrastructure serving the bulk electric power generation system. The MSC was formed in 2008 and is currently comprised of approximately 140 producing, midstream, transmission and supply chain members who are fully committed to working with local, county, state and federal government officials and regulators to facilitate the development of the natural gas resources in the Marcellus, Utica and related geological formations. Our members represent many of the largest and most active companies in natural gas production, gathering, processing, transmission and utilization, in the country, as well as the supply chain companies, contractors and professional service firms who work with the industry.

The MSC commends the North American Energy Standards Board (NAESB or Board) with soliciting these recommendations to help inform the deliberations of the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC). The significant transformation of the electric generation portfolio here in Pennsylvania, and throughout the PJM regional transmission organization of which Pennsylvania belongs, coupled with several high-profile winter storms (e.g. Winter Storm Uri, Winter Storm Elliott) and a significant shift on public policies that discourage or prohibit natural gas production and transmission in some jurisdictions, are sufficient cause to examine our current system of electricity generation and delivery and correct course where appropriate. It should go without saying that we must get this equation correct, as the lives of so many of our citizens are at risk if we are unable to deliver affordable, reliable energy to them during their time of need.

The MSC has distributed the NAESB surveys from both April and May to its board members for consideration of a response, as individual companies involved in the production, transmission and sale of natural gas are better situated to inform your deliberations. However, on behalf of our membership, and the Pennsylvania natural gas industry more broadly, I would like to offer the following comments for your review and consideration as you develop recommendations for both FERC and NERC.

Background on Pennsylvania

Over the past 15 years, Pennsylvania has risen to become the second largest producer of marketed natural gas in the United States. Pennsylvania produces more than 20 billion cubic feet of natural gas daily, or approximately 7.5 trillion cubic feet in 2022. This accounts for roughly 20% of the entire U.S. production of natural gas. The following chart shows the significant annual increases of production Pennsylvania has experienced over the past decade:

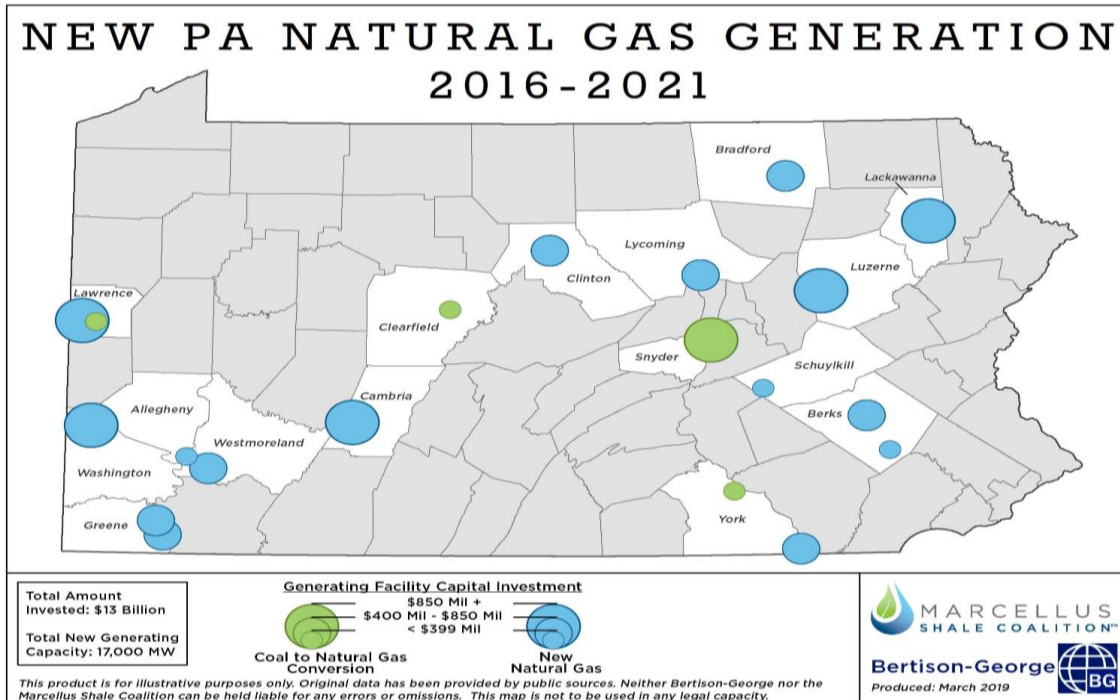


For further context, the MSC's board members produce, process and transport approximately 95% of the natural gas which is produced in Pennsylvania.

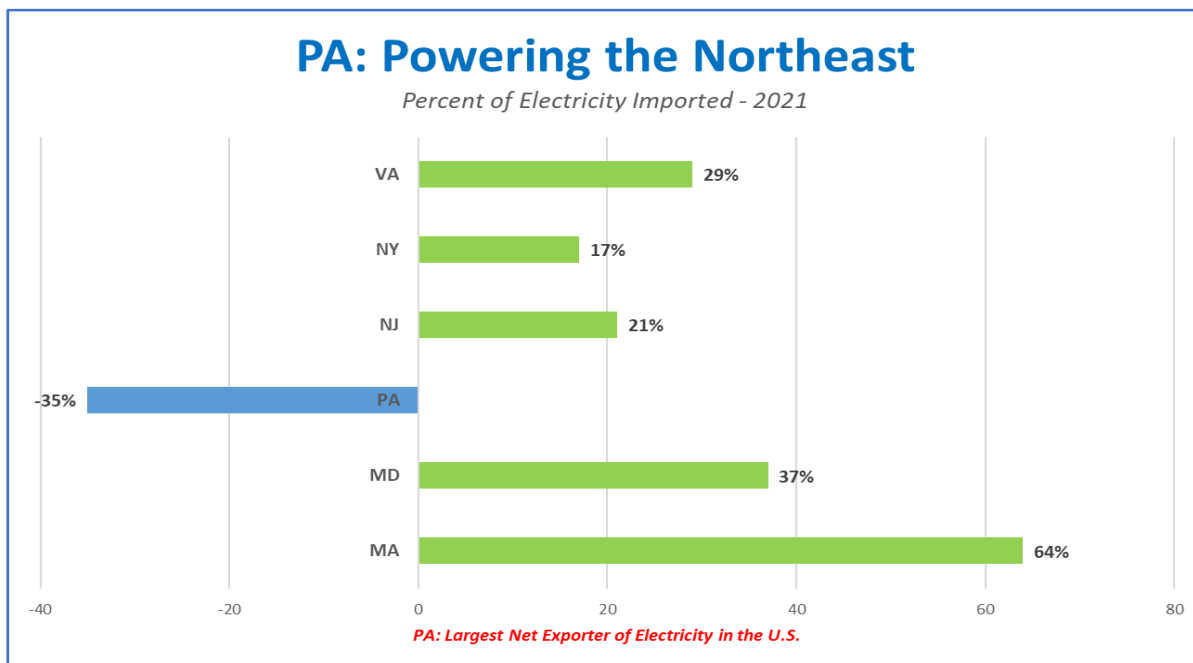
With respect to electric generation, Pennsylvania's portfolio has seen a significant shift to increased utilization of natural gas. In 2005, less than 5% of Pennsylvania's electricity came from natural gas, while in 2021 that number exceeded 53%. The growth of natural gas generation during this time period has largely replaced legacy coal-fired power generation facilities.

The following map illustrates the significant growth of new modern generation facilities as well as the conversion of several legacy coal-fired power generation facilities to natural gas:



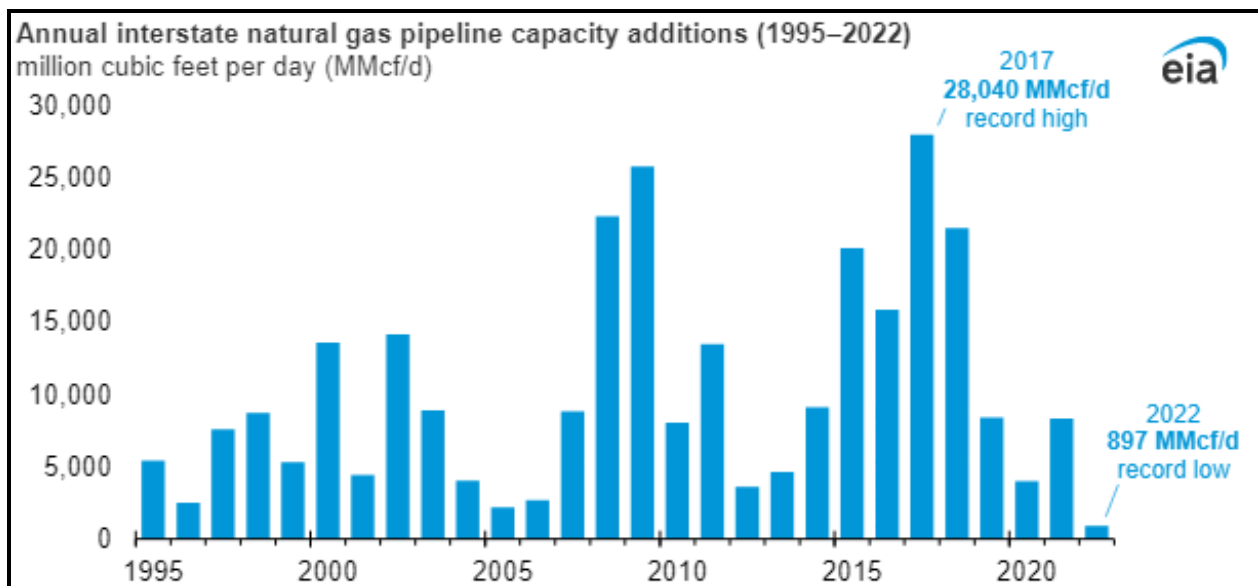


Pennsylvania currently has the largest installed capacity generation fleet in the northeastern United States, producing approximately 242 million megawatt hours of electricity in 2021. By comparison, the next largest generation state in the region was New York at 125 million megawatt hours of electricity. As depicted in the following chart, Pennsylvania is the largest net exporter of electricity in the U.S., while many other northeastern U.S. states rely upon the Commonwealth for their electricity.



The significance of Pennsylvania in meeting the electricity needs of the northeast underscores the significance of the Commonwealth's natural gas industry, and, as the Board is undertaking through this exercise, the importance of a reliable system of natural gas infrastructure to underpin the electric grid.

This is one area where the MSC strongly encourages the Board, FERC and NERC to prioritize the permitting, siting, and construction of natural gas pipeline infrastructure. In recent years, capacity additions to the nation's pipeline infrastructure have failed to meet demand. According to the U.S. Energy Information Administration, 2022 saw the least amount of additional natural gas pipeline capacity added to our system:



Again, for context, the additional capacity *for the entire nation* in 2022 equates to less than 5% of just Pennsylvania's total natural gas production. Failure to significantly increase additional interstate pipeline capacity – and to reform a broken permitting process that discourages capital investment – will continue to threaten the reliability of our electric grid and by extension the health, safety and welfare of our fellow citizens.

Issues on the Horizon

There are several fundamental issues related to reliability that the MSC is cognizant and supports reform of but defers to experts within the specific industry sectors to articulate. These include concerns over the current capacity market construct within PJM and the timeliness of navigating the PJM generation queue, as well as the timeliness of interconnecting to the transmission system.

The MSC is concerned about policies, both at the national and state level, which seek to advance the electrification of everything (buildings, vehicles, etc.), seemingly at all costs. Too often, these policies are advanced with little if any consideration of their impact on resiliency and reliability, let alone affordability. For example, in Pennsylvania over two-thirds of our citizens

rely upon natural gas to stay warm (*51% direct natural gas; 5% propane; 12% electric heat generated from natural gas*). This equates to over 8.8 million Pennsylvania residents that are at risk if access to a reliable, dependable source of natural gas is not assured. Shifting this much heating demand to electricity is not only inefficient from an energy intensity standpoint, but it also further strains an already strained electric grid. It is imperative to underscore that, despite the challenges evident to our system during the December 2022 Winter Storm Elliott event, there were no rolling blackouts in Pennsylvania, and no one lost their heat. The availability of natural gas – to homes, hospitals, schools, warming shelters and elsewhere – saves lives.

Yet the benefits we enjoy today are at risk in the future if we do not grow and expand our infrastructure. The historic pace of baseload electric power generation facility retirements which we have seen in recent years shows no signs of abating. Models evaluating the grid within PJM show serious concerns on reliability and resiliency within the next five years, as the reserve capacity margin of electricity supply is reduced from nearly 20% to single digits. Replacing retiring legacy facilities and meeting growing electric demand requires an accelerated infrastructure build-out: both of the natural gas infrastructure to transport fuel and feed generation facilities, and of electric transmission infrastructure to move the electricity to the end user.

Our infrastructure grid is financed by the private markets, and this has served consumers well over time by shifting capital risk away from ratepayers and driving innovation and efficiency within the market. But this market requires strong signals from our regulatory agencies that they will be able to plan, permit, construct and operate facilities with a necessary degree of certainty. Our failure to provide this certainty through a sufficient infrastructure build-out will harm our economy and ultimately put our fellow citizens at risk.

Conclusion

The MSC believes that a diverse energy portfolio, which prioritizes resiliency and reliability, best serves our modern society and its people. While we recognize that some of the issues identified here may be outside the purview of the specific solicitation of information desired by FERC and NERC, we nonetheless encourage the Board to utilize its voice in support of policies that place the interests of reliability, resiliency and affordability paramount in this conversation.

Thank you for your consideration of these comments.

Sincerely,



David E. Callahan, President
Marcellus Shale Coalition

