

ISSUE BRIEF June 2023

Electric Reliability & Affordability And the Importance of Natural Gas

- Natural gas is an important electric generation fuel and will continue to play an instrumental role in the electric system for the foreseeable future.
- The American Public Power Association (APPA) supports federal policies that help ensure a reliable and affordable supply of natural gas to support a reliable and resilient power grid and reasonable electric rates for customers.
- Without adequate natural gas supply and the pipeline infrastructure to transport it, natural gas, power, and home heating customers are likely to experience elevated energy prices. Federal policies should facilitate necessary infrastructure to address constraints on natural gas supply.
- APPA supports federal legislation that would allow federal authorities to cap the price at which wholesale sales of natural gas may be made during periods of acute supply shortage or to otherwise limit excessive natural gas wholesale prices.

Background

The electric and natural gas industries are interdependent, and recent developments, including extreme winter storms, significant fluctuations in natural gas commodity prices, and greater reliance on intermittent electric generation technologies, such as wind and solar, have brought a heightened focus on the relationship between those industries.

Natural gas has grown significantly as an electric generation fuel source in recent years, and natural gas-fired generation is expected to continue to play an important role in the nation's resource mix for the foreseeable future. Natural gas-fueled power plants can "ramp up" quickly to meet increased demand, making them critical to the overall reliability of the electric grid, especially as the generation resource mix transitions to more intermittent renewable energy. The North American Electric Reliability Corporation (NERC) said in its 2021 Long-Term Reliability Assessment (LTRA) that "[n]atural gas is the reliability 'fuel that keeps the lights on,' and natural gas policy must reflect this reality." A reliable and affordable supply of natural gas also depends on adequate transportation infrastructure, and NERC's 2022 LTRA observes that "additional pipeline infrastructure is needed to reliably serve electric load."

Many public power utilities rely on natural gas-fired electric generation, either owned or contracted through bilateral or organized wholesale electric markets, and these utilities continue to have a critical interest in access to reliable and affordable supplies of natural gas. Aside from the importance of natural gas to electric reliability, the price of natural gas often directly impacts the wholesale price of electricity, both within and outside the organized wholesale markets, and higher natural gas prices are likely to mean higher electricity bills for public power customers. According to Energy Information Administration, average benchmark natural gas spot prices increased sharply in 2022, reaching their highest annual average since 2008. While natural gas prices have fallen in recent months, the elevated 2022 prices imposed a significant burden on numerous public power utilities that purchase natural gas as electric generating fuel. Further, such fluctuations in commodity prices can make it more challenging for utilities to manage their gas supply requirements in a manner that is most cost-effective for their customers.

The severe arctic weather event known as Winter Storm Uri in February 2021 vividly illustrated the reliability and economic interdependencies between the electric and natural gas sectors. During Winter Storm Uri, there was a massive decline in natural gas production, with natural gas fuel supply struggling to meet both residential heating load and electric generating unit demand for natural gas. Although natural gas is an essential fuel for home heating, electric generation, and other critical uses, the price of the natural gas commodity is fully deregulated, and natural gas prices spiked to unimagined levels during Winter Storm Uri. These high fuel prices contributed to soaring wholesale electricity costs in some regions. Some of the same natural gas and electric interdependencies were observed during Winter Storm Elliott in December 2022, with several regions engaging in controlled outages to preserve system stability.

Regulatory and Congressional Actions

In November 2021, the Federal Energy Regulatory Commission (FERC) and NERC staff issued a report on the Winter Storm Uri event that included numerous recommendations to address the problems that arose during the storm. One outgrowth of the report is an ongoing forum convened by the North American Energy Standards Board to identify concrete actions to increase reliability of the natural gas infrastructure system necessary to support the bulk electric system. Because the FERC-NERC Report was limited to the grid reliability impacts of Winter Storm Uri, it did not address the storm's severe economic consequences, such as extreme natural gas spikes and the related increases in wholesale electric costs. FERC has also convened several conferences to explore issues relating to electric grid reliability, extreme weather events, and the role of natural gas fuel.

Separately, FERC is currently considering two draft policy statements that outline a revised approach for its evaluation of new natural gas pipeline project applications under the Natural Gas Act (NGA). One draft policy statement addresses FERC's general policy for granting certificates for pipelines and liquefied natural gas projects under the NGA. The other policy statement explains how FERC would assess the impacts of natural gas infrastructure projects on climate change in its reviews under the NGA and the National Environmental Policy Act, with a focus on FERC's consideration of greenhouse gas (GHG) emissions associated with proposed projects. APPA filed comments in response to the draft policy statements, citing the importance of new pipeline infrastructure and urging FERC to provide clearer guidance on how it will balance the benefits and adverse impacts of proposed projects. APPA also urged FERC to clarify the suggestion that it will encourage applicants to mitigate "indirect" GHG emissions from new pipeline projects, given the substantial uncertainty that the proposed policy has created for natural gas pipeline companies, and the potential deleterious effects on pipeline infrastructure development.

Lawmakers in Washington held numerous hearings in the immediate aftermath of Winter Storm Uri, but no substantive remedial action has followed. At least one bill was introduced, however, that would have allowed the implementation of natural gas price caps in emergency situations and the imposition of civil penalties for exceeding the caps. APPA supports federal legislation that would allow federal authorities to temporarily cap the price at which wholesale sales of natural gas may be made during periods of acute supply shortage or to otherwise limit excessive natural gas wholesale prices.

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The American Public Power Association is the voice of not-for-profit, community-owned utilities that power 2,000 towns and cities nationwide. We represent public power before the federal government and protect the interests of the more than 49 million people that public power utilities serve and the 96,000 people they employ.