

Seth Ricketts

Legislative Clerk

Committee on Energy and Commerce

2125 Rayburn House Office Building

Washington, DC 20515

June 8, 2026

Mr. Ricketts:

Please find my response to the question for the record posed by the Honorable Brett Guthrie attached.

Sincerely,

A handwritten signature in black ink that reads "Michael Goggin". The signature is written in a cursive style with a large, stylized "M" and "G".

Michael Goggin

The Honorable Brett Guthrie (R-KY)

1. Your testimony says that coal and natural gas power plants underperformed during Fern. This conclusion is based, in large part, on outages of coal and gas power plants. However, there are other metrics that can be used to measure the performance of different electricity resources. In particular, isn't the ability of a resource to increase its capacity factor when the electricity system is under stress an even stronger indicator of performance since capacity factors take into account outages as well as other factors that might affect performance?"

Mr. Goggin's Answer

I agree that capacity factor is an important metric of the performance of different generation resources during periods of peak demand on the electric grid. Applying that metric to the regions most affected by Winter Storm Fern shows wind and solar resources' capacity factor exceeded the level grid operators plan for, while fossil generators underperformed their expected capacity factor. The primary focus of my testimony was to compare the generation output (which tracks with capacity factor) of different resource types, as shown in Tables 1, 2, and 4 of my written testimony. In particular, Table 2 shows that during Winter Storm Fern, renewable resources' capacity factor exceeded the accredited capacity grid operators plan for in SPP and MISO, while coal and gas had capacity factors well below their accredited capacity. Once that comparison of the output of different resource types was established, I then delved into outage rates in Table 3 to distinguish whether fossil resources underperformed due to outages or because they were economically dispatched down. Table 3 shows that high outage rates account for some of the underperformance of coal and gas generators, but gas generators being economically dispatched down due to high fuel prices also appears to have been a significant factor.

Capacity factors for fossil resources can be low either because of outages or because their output is economically dispatched down if power prices are not high enough for them to cover their fuel cost and other variable operating costs. This is particularly true during events like Winter Storm Fern, when gas prices at many locations in the Eastern U.S. were dozens of times higher than normal. Wind and solar resources are not economically dispatched down due to fuel prices because their fuel is free and thus they are not subject to fuel price fluctuations.

Renewable resources' lack of fuel costs helps protect ratepayers from both short-term and long-term risk. As an example of short-term fuel price risk from excessive dependence on fossil generation, Dominion Energy in Virginia has filed to recover \$567 million from ratepayers to cover fuel costs in January 2026 alone due to the high price of gas during Winter Storm Fern. As an example of longer-term fuel price risk, the ongoing war in the Middle East and other geopolitical events can cause increases in the global price of fossil fuels. Sustained disruptions to global gas supply, when coupled with increased U.S. exports of liquefied natural gas, can lead to higher domestic prices for natural gas. The domestic price of diesel fuel has also increased by more than 50% since shipping through the Strait of Hormuz closed, and the cost of diesel is a major input into the cost of coal delivered to power plants via train, truck, or barge.