## UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Reliability Technical Conference

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This FERC Reliability Technical Conference provides an important opportunity for the public to be informed and for industry stakeholders to discuss policy issues related to the reliability and security of the Bulk-Power System, including the impact of the Environmental Protection Agency's proposed rule under section 111 of the Clean Air Act on electric reliability. I appreciate being part of this panel.

A common theme in prior instances where EPA issued proposals to control power plant emissions is that industry stakeholders raise concerns that the proposal, if adopted by EPA, would jeopardize electric system reliability and thus conflict with the industry's obligation to provide around-the-clock electricity supply to consumers. Such red flags were raised in 2010 and 2011 about EPA's regulations to control mercury, other harmful emissions and interstate transport of air pollutants, and again in the 2013-2015 period when EPA was considering and eventually proposed regulations to control greenhouse gases emitted from fossil-fueled power plants.

In each of those contexts, I wrote reports and provided testimony and commentary that acknowledged the critical importance of electric system reliability and described the various tools available to the industry to ensure the reliable supply of power even as owners of fossil-fueled generating units were required to take steps to reduce their emissions. Some of these tools were written into the design of EPA's proposals themselves, because in each instance, EPA took into consideration the need to keep the lights on even as power plants complied with new regulations. Other tools are standard elements of the tool kits long available to players in the electric industry.

In every instance in the past dozen years, the industry predictably stepped up to ensure that reliability was not compromised – mainly because these many tools are available and because power plant owners, reliability organizations, regulators, other public officials, and a wide range of other stakeholders take myriad actions to ensure that the grid as a whole performed its essential public service functions.

In fact, in spite of early industry concerns that EPA's 2015 Clean Power Plan would introduce reliability problems if it went into effect (which it never did, after its implementation was stayed by the court and replaced by EPA in 2019), power sector carbon dioxide emissions dropped to 34% below 2005 levels (thus exceeding the Clean Power Plan's goal of reducing such emissions by 32% by 2030) – and without reliability consequences tied to such emissions reductions.

The nation's electric industry has been undergoing significant change over the past decade. The portfolio of generating resources has transitioned, with retirements of significant coal-fired generating capacity, with gas-fired power plants now providing the largest share of electricity supply, and with wind and solar energy making up increasing percentages of electricity. Electricity demand has begun to grow. Fundamental market forces, federal and state policies, and consumer preferences are principal drivers of such changes. Extreme weather events, including frigid cold, droughts, heat waves, wildfires, and torrential downpours and flooding have disrupted energy infrastructure, including on the electricity grid.

Many stakeholders have commented that in light of these circumstances, EPA's recent proposal errs in a number of ways, especially by not allowing more time for compliance and more expansive safety valves to provide more flexibility in the event that reliability problems arise.

Although some of the particulars of the current context are different from in the past, there are many reasons to feel reassured that this new EPA rule will not jeopardize electric system reliability. (I have just completed a new report on these issues.)

First, the electricity reliability institutions, tools and processes in place today are as

2

good as, if not better than, those in place a decade ago. In addition to its important and continually updated reliability assessments of reliability conditions and outlooks, the North American Electric Reliability Council has instituted new assessments and tools to identify reliability risks and to recommend approaches to mitigate them.

Second, significant attention is already being paid by federal and state legislators, reliability organizations, and regulators and other public officials to address confounding circumstances – including gas/electric coordination issues, cybersecurity risks, transitions in generation portfolios, need to enhance the resilience of energy infrastructure, transmission expansion challenges, wholesale market rule considerations, utility forecasting and planning, equity concerns – so as to assure the grid is fit for purpose in the years ahead.

Third, the EPA proposal to curb GHG emissions from existing electric generating units itself includes multiple features to accommodate flexibilities in implementation and compliance-related reliability concerns. These elements of the proposal include: the fact that emissions limits apply only to some subcategories of existing generating units; the long lead times for compliance (with varied deadlines for units with different "operating horizons" and capacity factors); the ability of states to design implementation plans with a degree of allowance trading and banking; the commitment of the Department of Energy to use its authorities in a circumstance where compliance at a particular unit might trigger a local reliability concern; and the proposed rule's "system emergency exclusion for reliability."

Unquestionably, the important reliability risks that currently affect the electric industry must be addressed and there is significant work underway to do so. Regardless of requirements that developers of new gas projects and owners of existing fossil fuel power plants comply with new GHG emission reduction requirements on existing power plants, the electric industry must take the steps necessary to ensure reliability given the many other changes already underway and that are affecting the nation's energy transition.

3