

**Written Testimony of Neil Chatterjee
Chairman
Federal Energy Regulatory Commission
Before the Subcommittee on Energy
Committee on Energy and Commerce
United States House of Representatives
June 12, 2019**

Chairman Rush, Ranking Member Upton, and Members of the Subcommittee:

Thank you for the opportunity to appear before you today to discuss the important work we are doing at the Federal Energy Regulatory Commission (FERC). My name is Neil Chatterjee, and I am the Chairman of FERC. I appreciate the Subcommittee's attention to the major energy issues facing our nation and the role that FERC plays in addressing those issues for the American people.

This is an exciting and transformational period for our nation's energy landscape. I take very seriously the responsibility to work with my colleagues to ensure that all Americans have reliable and affordable energy supplies. Today I will focus my remarks on two of my priorities: the Commission's efforts to allow for storage resources to better participate in the wholesale electric markets and our focus on the importance of security measures to protect from cyber and physical threats to the nation's bulk-power system. I will also address FERC's efforts to reform our regulations under the Public Utility Regulatory Policies Act of 1978 (PURPA), an issue I know many of you have been following closely.

Electric Storage

Over the last decade or more, our country has seen many changes in the energy industries that FERC regulates. As such, it is essential for FERC to remain vigilant about these changes and respond to them in ways that enhance competition in electricity markets, support the resilience of the bulk-power system, and lower costs to consumers.

One of these recent transformations we have seen is the improvement in electric storage technologies. I want to highlight the Commission's work, which I am extremely proud of, regarding the participation of electric storage resources in wholesale electricity markets as an example of how FERC is responding to our evolving energy landscape.

Traditionally, a variety of factors have created challenges to storage resources' participation in the wholesale electric markets. Because of this, in 2018, FERC issued Order No. 841 to remove barriers to the participation of electric storage resources in the capacity, energy, and ancillary services markets operated by regional transmission organizations (RTOs) and independent system operators (ISOs). FERC is now evaluating the December 2018 filings that RTOs and ISOs made to implement Order No. 841. As a result of this order, I expect an increase in the deployment of storage resources, which should result in greater reliability and lower prices for customers by enhancing competition. This is but one example of how FERC is proactively addressing shifts in the energy industries that we regulate and ensuring that emerging technologies can serve an integral role in wholesale electric markets.

In addition to our work to reduce barriers for storage resources, FERC is evaluating barriers to the participation of distributed energy resource aggregations in the markets operated by RTOs and ISOs. Last year, FERC staff held a technical conference to gather more information regarding the participation of distributed energy resource aggregations in wholesale electricity markets, as well as to discuss more broadly the potential effects of distributed energy resources on the bulk-power system. FERC is currently considering the record as we determine how to move forward.

Cyber and Physical Security

Another priority I would like to discuss today is cyber and physical security. As you are aware, America's critical infrastructure is increasingly under attack by foreign adversaries. The Department of Homeland Security (DHS) and Federal Bureau of

Investigation have issued multiple public reports describing cyber-intrusion campaigns by foreign government actors against our critical infrastructure, including the electric grid. Physical and cyber-attacks on our critical infrastructure systems have the potential to create significant, widespread, and potentially devastating effects that threaten the health, safety, and economic prosperity of the American people whom we serve.

This evolving threat landscape demonstrates the importance of an unwavering focus on the security of the nation's critical energy infrastructure. Of course these issues are of paramount concern to all of us, including the Subcommittee. I appreciate the Subcommittee's attention to this crucial subject, including efforts to examine legislative solutions like those that recently moved through the mark-up process.

At FERC, we have and continue to address cyber and physical security risks as consistent with section 215 of the Federal Power Act, which grants us the authority to approve and enforce mandatory Reliability Standards developed by the North American Electric Reliability Corporation (NERC). We have also taken up voluntary initiatives with federal, state, and industry partners.

In 2018, FERC issued two significant orders that improved bulk-power system security. First, at our October 2018 Commission Meeting, we approved NERC's proposed Reliability Standards to address supply chain threats. This action is particularly significant given that these specific threats to the energy sector continue to grow. Second, at our July 2018 Commission Meeting, we approved a final rule directing NERC to expand reporting requirements for critical systems. That final rule directed NERC to develop a standard that requires registered entities to report successful and attempted intrusions into critical systems to NERC's Electricity Information Sharing and Analysis Center, as well as to DHS. NERC recently filed a new Reliability Standard to satisfy the directive, which is currently pending before the Commission. But FERC does not just approve Reliability Standards. Since 2016, FERC has conducted audits of industry's compliance with cyber security Reliability Standards, the goal of which is not only to

assess compliance with the Reliability Standards but also to learn and share best practices.

In addition to its work on the mandatory Reliability Standards, FERC's Office of Energy Infrastructure Security engages with partners in industry, states, and other federal agencies to address both cyber and physical security issues for critical energy infrastructure. These initiatives include, among other things, voluntary architecture assessments of interested entities, classified briefings for state and industry officials, and joint security programs with other government agencies and industry. The responsibility for securing critical infrastructure is shared by industry and government authorities at the federal and state levels, and it is imperative that we continue to strengthen these partnerships.

To that end, FERC and the Department of Energy held a joint technical conference on March 28, 2019, with federal, state, and industry officials, to discuss investment incentives for cyber and physical security. The conference considered current threats against energy infrastructure, best practices for mitigation, the adequacy of current incentives for investing in physical and cyber security protections, and cost recovery practices at both the state and federal level. I appreciate the broad engagement and interest we saw at this conference, and look forward to continuing to evaluate the testimony and comments we have received since then.

PURPA

Finally, I would like to mention our ongoing work with regard to revising our regulations under PURPA. The bulk of the Commission's PURPA regulations were enacted in the early 1980s. Since that time, PURPA has played an important role in the development of renewable technologies and the electric industry's transition to competitive markets. However, the energy landscape that existed when PURPA was

conceived more than four decades ago was fundamentally different from that of today. For example, solar and wind power were fledgling technologies, there was no open access to competitive wholesale electricity markets, and natural gas was in scarce supply. Yet, none of those statements ring true today. Moreover, many states have encouraged the development of renewable generation through renewable portfolio standards, and Congress adopted the Production Tax Credit to continue to advance renewable development.

Given these and other changes in the past 40 years, the Commission has undertaken a review of our regulations to ensure that FERC is fulfilling its obligations under PURPA. Although I cannot discuss the specifics of our internal deliberations on this matter, I will continue working with my colleagues to determine the best path forward on this issue.

Other Issues before FERC

While these are just a few of my top priorities, there are many other important issues before the Commission, which my fellow Commissioners LaFleur, Glick, and McNamee will address. Our work affects nearly every corner of America and every facet of our economy. So there is no shortage of tasks before us.

Again, I appreciate the opportunity to come before you today to discuss the work of the Commission. It is critical that we at FERC work together with other agencies as well as Congress to navigate the transformation of America's energy landscape, and I look forward to continuing this important dialogue. I am happy to answer any questions.