WRITTEN STATEMENT

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UNITED STATES NUCLEAR REGULATORY COMMISSION

TO THE

HOUSE COMMITTEE ON ENERGY AND COMMERCE

SUBCOMMITTEE ON ENERGY, CLIMATE AND GRID SECURITY

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Chair Duncan, Ranking Member DeGette, Chair McMorris Rodgers, Ranking Member Pallone, and distinguished members of the Subcommittee. My name is Dan Dorman. I am the Executive Director for Operations at the Nuclear Regulatory Commission (NRC). I appear before you today representing the NRC staff. As you know, the NRC is an independent Federal agency with a mission to license and regulate the use of radioactive materials to provide adequate protection of public health and safety, promote the common defense and security, and to protect the environment. Within the NRC, the Executive Director is responsible for overseeing the agency's operational and administrative functions and serves as the chief operating officer. I welcome the opportunity to provide the Subcommittee the NRC staff's views on the bills under consideration as they move through the legislative process. Today, I will address three specific areas I believe are of interest to this Subcommittee, specifically, our regulatory framework for new and advanced reactors, the environmental review process, and international cooperation.

REGULATORY FRAMEWORK FOR NEW AND ADVANCED REACTORS

Industry is developing new and advanced reactor designs, and the staff is reviewing pre-application materials and submitted applications commensurate with the risk and safety

significance of the proposed technology. Over the past several years, the NRC has been working to modernize its existing licensing processes to support the deployment of new and advanced reactors through the application of risk-informed and performance-based techniques and regulatory guidance. Additionally, the NRC has streamlined its licensing review process by using a “core team” approach to complete reviews of applications we have received so far.

Other streamlining and efficiency efforts include extensive pre-application interactions, regulatory audits to enhance communication with applicants and licensees, and early engagement with the NRC’s Advisory Committee on Reactor Safeguards.

In addition, the NRC staff is developing a new optional regulatory framework for licensing new reactors in accordance with the Nuclear Energy Innovation and Modernization Act or NEIMA. In March, the NRC staff submitted this draft proposed framework, known as the Part 53 rule, to the Commission for its consideration. The rule would establish a technology-inclusive, risk-informed, and performance-based regulatory framework for licensing and oversight of new commercial nuclear power plants. Part 53 will reflect best practices and lessons learned from new and advanced reactor licensing reviews conducted under the existing regulations. The NRC expects to issue the final rule in 2025, well ahead of the NEIMA requirement of December 31, 2027.

The NRC is also looking at how it assesses fees for the review of new and advanced reactors applications to make sure they are fair and equitable. The NRC is required by NEIMA to bill entities for the regulatory activities that we perform. The fees incurred vary based on the type and quality of an application, the novelty of the technology, and the complexity of the proposed design. The NRC clarified the applicability of its variable annual fee structure for small modular reactors, or SMRs, to make it clear that non-light water reactor SMRs are included. This

clarification allows the agency to be technology inclusive and establish a fair and equitable approach for assessing annual fees to all new and advanced reactors, which would result in lower fees for many of these applicants.

ENVIRONMENTAL REVIEW TRANSFORMATION

The NRC continues to assess and implement processes to streamline our environmental reviews, while still complying with the National Environmental Policy Act and related laws. Currently, we are working aggressively to implement the Commission's direction to ensure that the NRC's environmental regulations, supporting analyses, and guidance fully support the subsequent renewal of nuclear power plant operating licenses from 60 to 80 years. To that end, the staff expects to finalize by 2024 a rulemaking to update the license renewal Generic Environmental Impact Statement to explicitly address subsequent license renewal.

The NRC is aware that the industry is interested in using "brownfield" sites, such as former coal plants or shuttered nuclear power plants, to use existing infrastructure and workforce. If we receive applications for new nuclear plants at these types of sites, existing data about the sites could be leveraged to support our environmental review of such requests.

INTERNATIONAL COOPERATION

The NRC's international portfolio includes import and export licensing obligations as well as a broad range of international cooperation and assistance functions. To prepare for the export of advanced reactor technologies, the NRC has initiated a rulemaking to clarify that its export regulations include non-light-water reactor technologies. This work will reduce potential regulatory uncertainties related to the deployment of equipment and substances associated with

advanced reactors and improve predictability and efficiency in the NRC's licensing reviews of export applications.

With respect to international cooperation and assistance, the NRC engages with its foreign regulatory counterparts and other international partners to collaborate on a wide range of regulatory topics, including licensing and oversight of SMRs and advanced reactors. For example, we have had noteworthy success in performing joint technical reviews under our Memorandum of Cooperation with the Canadian regulator on highly complex areas of interest for SMRs and advanced reactors, including fuel qualification. The NRC staff is also engaged in multilateral collaboration through the International Atomic Energy Agency on efforts such as the development and harmonization of safety standards. Collectively, these efforts demonstrate the value of international cooperation in advancing the regulatory review of SMR and advanced reactor designs.

The NRC also complements broader U.S. Government nuclear energy outreach by providing targeted regulatory capacity development to countries with growing regulatory programs to ensure they are prepared to provide appropriate oversight of nuclear power or material use within their borders. For example, Chair Hanson recently signed a five-year cooperation agreement renewal with the President of Poland's National Atomic Energy Agency that enables the exchange of information to support Poland in expanding its regulatory program to license both traditional large light-water reactors and SMRs. And Chair Hanson is not at this hearing because he is in Senegal and Ghana this week. Ghana is embarking on a nuclear power program to meet its electricity needs and signed a Memorandum of Understanding Concerning Strategic Civil Nuclear Cooperation with the U.S. to strengthen economic and diplomatic ties. The Chair is there deepening the relationship and emphasizing the importance of a regulator that is independent, technically competent, and adequately funded. In addition, the NRC

continues to host foreign regulatory staff through personnel exchanges to share information and experiences regarding our regulatory processes. We have seen a marked increase in the demand for regulatory support in capacity-building efforts internationally and are actively engaged with our Federal partners to ensure these efforts are coordinated and prioritized consistent with U.S. Government strategic objectives.

CONCLUSION

I appreciate the subcommittee's interest in the NRC's mission and the work of its dedicated staff, as well as the opportunity to address you today. We look forward to continued engagement with members of Congress as the legislation under consideration today advances. I look forward to your questions.