HOUSE COMMITTEE ON ENERGY AND COMMERCE SUBCOMMITTEE ON ENERGY, CLIMATE, AND GRID SECURITY

"The Fiscal Year 2025 Nuclear Regulatory Commission Budget"
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WRITTEN STATEMENT BY COMMISSIONER ANNIE CAPUTO UNITED STATES NUCLEAR REGULATORY COMMISSION

Thank you, Chair Rodgers, Subcommittee Chair Duncan, Ranking Members Pallone and DeGette, and members of the committee for holding this important hearing. I have fond memories of my service to the Members of this great committee and am pleased to come before you today.

Reliable, affordable, and clean energy is the lifeblood of the economy. This Committee is well aware of how baseload electricity generation is retiring at the same time electricity demand is accelerating. In addition, the Administration signed a declaration at COP 28, the UN Conference on climate change, to triple nuclear energy capacity by 2050. Congress has passed the ADVANCE Act and other policies, programs, and incentives to spur nuclear energy development. These actions demonstrate bipartisan recognition that nuclear energy must play a growing role in meeting our nation's energy security needs.

The NRC's longstanding mission has been safety, security, and protecting the environment. In focusing on that mission and our day-to-day work that supports it, however, it can be easy to lose sight of the larger, changing landscape and how we, as an agency, fit into a much bigger picture. While several companies are in pre-application engagement with the agency, only a few applications are currently under review. This is sure to change as the momentum for nuclear energy deployment grows. The scope and pace of this change may be

dramatic, and we must be prepared for it. Instead of a limited number of applications from utilities that are experienced licensees, we expect to see applications for uses of nuclear energy in ways we haven't licensed before. This includes not only advanced reactors, but reactors used for industrial heat, microreactors in remote locations, and more. Therefore, we must strive to improve our performance, not simply measured by safety, but also by the efficient and timely completion of our work.

In the ADVANCE Act, Congress directed just that. More specifically, that our safety mission be updated to include that licensing and regulation of nuclear energy be "conducted in a manner that is efficient and does not unnecessarily limit the civilian use of radioactive materials and deployment of nuclear energy; or the benefits of civilian use of radioactive materials and nuclear energy technology to society." Congress's bipartisan intent could not be any clearer: the NRC must become more efficient, predictable, and timely.

We, the NRC, are the gatekeepers for the safe use of nuclear energy. As an agency, we expect ourselves and our licensees to put safety first. That expectation is shared by Congress, the public, and other external stakeholders. Whether nuclear energy will make a growing contribution to our nation's clean energy needs will depend on the posture with which we execute our safety and security mission. Updating our mission statement is an opportunity to align our culture in recognition that the nation needs us to improve our performance, and Congress expects it.

I believe the path to improving performance lies in getting back to basics. By that I mean focusing on mission execution, improving the agency's agility, making timely and consistent decisions, and achieving results.

In 1974, Congress passed the Energy Reorganization Act to establish the NRC¹ when the country was facing a different energy transition. The declared purpose from the Energy Reorganization Act sounds similar to many of the goals our nation has today, fifty years later:

The Congress hereby declares that the general welfare and the common defense and security require effective action to develop, and increase the efficiency and reliability of use of, all energy sources to meet the needs of present and future generations, to increase the productivity of the national economy and strengthen its position in regard to international trade, to make the Nation self-sufficient in energy, to advance the goals of restoring, protecting, and enhancing environmental quality, and to assure public health and safety.

The provision that established the Nuclear Regulatory Commission states: "There are hereby transferred to the Commission all the licensing and related regulatory functions of the Atomic Energy Commission..."

Thus, licensing was the only specifically enumerated function. Today, while the agency remains diligent in its oversight and inspection work, licensing reviews are a relatively small portion of the agency's activities. Over time, the "related regulatory functions" have come to dominate our operations. No where is this clearer than in our budget.

The costs of licensing reviews are recovered from the respective applicants or licensees.

While this workload is expected to grow in the future, it hasn't yet. The Nuclear Energy

Innovation and Modernization Act defined "Requested Activities of the Commission" to

¹ Energy Reorganization Act of 1974, 42 USC § 5801 et seq. (1974).

² *Id.* at § 5841.

encompass all licensing reviews that would be requested by a licensee or applicant. In the FY 2024, the budget estimate for that work was \$88 million, only 9 percent of our total budget. For FY 2025, it's estimated to drop slightly to \$82 million, or 8 percent of our total budget.

And yet, there have been delays in some licensing reviews, specifically license renewals, due to a lack of staff resources. This indicates licensing is competing for management attention with the other "related regulatory functions" funded by the other 92 percent of our budget.

The NRC Strategic Plan also places little emphasis on licensing. Of the 32 strategies it contains, only one is directly related to licensing decisions: "Promote risk-informed decision making to result in effective and efficient oversight, rulemaking, and licensing and certification activities."

In response to your direction in the ADVANCE Act, we should prioritize effective and efficient licensing reviews and afford it proper management attention. It is imperative that we improve our performance now to best position the agency to effectively manage the change that is to come.

Improving the agency's agility is a growing necessity. We know that change is coming, but we aren't quite sure when it will come or what it will look like. The NRC is very experienced in licensing large light water reactors. However, there is a wide variety of technologies and deployment models under development. There is also a wide variety of uses that customers may choose. It's also likely that there will be business plans that vary from the nuclear utility model that we are familiar with. Given these variables, the best approach is to cultivate the agency's ability to adapt quickly to evolving industry plans and licensing needs. We

³ Nuclear Regulatory Commission "Strategic Plan: Fiscal Years 2022-2026" (NUREG-1614, Volume 8).

need to approach staff training with the goal of developing a more flexible team of licensing staff with capabilities that can be utilized for a range of applications as the workload changes. We must maintain external awareness, but also recognize the likelihood of ongoing changes and be prepared to adapt to it.

The first Kairos review was an important success, but it is one data point that needs to grow into a predictable pattern. Applicants need regulatory predictability and stability.

Decisions should routinely be risk-informed, objective, transparent, and consistent. When an applicant gains approval for a particular regulatory approach, other applicants learn from that success and incorporate that same approach, thereby improving the quality of their own application. If that approval is consistently applied by the NRC staff, reviews will become more efficient and predictable, improving the reliability and stability of the licensing process.

Our performance should not simply be measured by safety, but also by the efficient and timely completion of our work. We, as an agency, need to set clear and aggressive, but achievable goals in workload execution and use meaningful metrics to guide performance improvement. We need to track performance with meaningful metrics to achieve improved results. Metrics are essential to inform leadership and guide management on how best to demonstrate the agency's agility and improve the agency's execution. The ADVANCE Act clearly sets forth Congress's expectations for the agency to demonstrate efficient, predictable, and timely reviews. It is also important to maintain stakeholder confidence in the agency's effectiveness and reliability. When we came before you last year, Commissioner Wright and I committed to propose a voting matter to our colleagues to implement performance metrics and we did that nearly a year ago.

For over 20 years, the NRC has successfully used performance indicators as an objective measure of licensees' safety performance in the Reactor Oversight Process. As a result, the industry has reported how, over a 20-year span, safety has improved according to every NRC performance indicator. The NRC needs to harness metrics as a tool to improve its own licensing performance in accordance with the ADVANCE Act. I believe this is crucial to enable the safe and timely licensing reviews in line with congressional expectations. I also think demonstrating that we can achieve timely reviews and celebrating those successes is also vital to improving morale. Being a valued part of a productive, successful team boosts job satisfaction.

The ADVANCE Act also sets expectations for improvement in our oversight and inspection programs. Section 507 directs the NRC to provide a report on specific improvements to maximize the efficiency of our oversight and inspection programs. We have over 20 years of experience with the Reactor Oversight Process. This provides a wealth of data and an opportunity to use data-driven decision making to risk-inform, refine, and modernize our oversight processes. I expect there are opportunities to adapt inspection efforts to more closely align with safety significance and better reflect the industry's improved safety performance. Similarly, in our materials programs, there are likely opportunities to share best practices, better align resources to safety significance, and improve efficiency. Gathering stakeholder input as directed in the Act will provide particularly insightful contributions to improving our performance in oversight and inspection.

Our workforce is our greatest asset. I am honored to serve at an agency with such brilliant and capable staff. Much will be expected of them as the agency endeavors to successfully

⁴ Nuclear Energy Institute "The Nexus Between Safety and Operational Performance in the U.S. Nuclear Industry" March 2020.

navigate the years to come, but I believe they will rise to the challenge. For that reason, we must do more, now, to prepare them to be agile decision-makers, adaptive to changes in the workload. The agency's success depends on it.

Only a few years ago, over half of the NRC's workforce was eligible to retire. Now, that number is closer to a third. To manage that retirement wave, we have hired over 600 personnel in the last couple of years. This represents a 20% turnover of our workforce. The agency has been poorly positioned in both strategic workforce planning and knowledge management. The agency needs a more holistic, long-term view about the skills and capabilities necessary to execute the coming workload. Leaders need to be intentional and strategic so that when the landscape changes, the agency can quickly adapt by assigning staff with the right skills where they are needed.

Agency leadership needs to cultivate a workforce built with the best talent and brightest minds dedicated to executing our mission and instilling a culture of striving for the highest levels of performance. Whether staff are new or have been with us for years, they are drawn by a commitment to public service and our mission. But it's not clear that we are giving them the training they need to develop or empowering them to fully contribute and be successful, whether they are environmental reviewers, project managers or resident inspectors. Our knowledge management should be structured with a long-term view that expands staff skills through crosstraining. This would make them valuable in a range of positions and serve them well through career development.

Agency leaders must also prioritize staff focus on licensing and oversight work. To execute licensing reviews efficiently, staff must be empowered to use their deep knowledge of the agency and its processes to renew efforts to risk-inform and streamline internal operations. I believe the agency would benefit from a clear-the-decks exercise to reduce unnecessary busywork. This might take significant leadership effort but would free up our employees' capabilities to prepare for and manage the wave of work that is likely to grow. I expect a reduction in unnecessary busywork would also reduce stress and improve job satisfaction for our employees, which is something personally important to me.

In 2008 and 2009, when NRC was rated "the best place the work," it was the start of the renaissance when the agency was executing an extremely heavy workload with challenging schedules and a sense of urgency. I'm confident they will rise to this new challenge and strive to meet or exceed the goals we set for them with focused, high-caliber leadership.

In order for the agency to successfully navigate the future and meet Congress's expectations, we must cultivate results-driven leadership. We need leaders who can innovate without falling prey to groupthink; leaders who can implement and sustain change.

Recognizing the landscape is changing is a necessary step but isn't enough. Talking about it isn't enough. In his book "Measure What Matters," John Doerr stresses how "Ideas are Easy. Execution is everything."

Subsequent license renewal is a body of work that has been long anticipated. In 2015, the first licensee notified the agency of their intent to file an application. Yet the agency is still struggling to execute efficient, predictable reviews nine years later. This situation represents a need to improve enterprise risk management, responsible budgeting, strategic workforce

planning, knowledge management, agility, and workload management. I commend Chair Hanson for proposing a voting matter for the Commission to wrestle with this.

The dynamics at play in this situation are indicative of a larger issue. We, as an agency, need to closely examine our leadership development. It's evident our leadership team has skill gaps that need to be addressed in order for the agency to function at its best. We need to do a better job of ensuring we are preparing our leaders to fully execute their responsibilities and to lead positive culture change, develop our workforce, and improve performance. In short, we need to cultivate focused, decisive, results-driven leaders who can prepare the agency to be successful.

Conclusion

Our country's growing need for electricity is going to require significant new generation. The ADVANCE Act makes clear the compelling need for the NRC to become more efficient, predictable, and timely in its licensing decisions amidst significant changes in the nuclear energy landscape. The agency must reassert the importance of licensing as principal to our mission and improve our agility in responding to those changes. We need to set clear and aggressive, but achievable goals and embrace the use of metrics to track our progress, guide performance improvements, and hold ourselves accountable for results.

Our Principles of Good Regulation state: "The American taxpayer, the rate-paying consumer, and licensees are all entitled to the best possible management and administration of our regulatory activities." The Administration and Congress expects it, and our country needs it. I believe the NRC can achieve it.