Statement of Commissioner Jeff Baran
House Committee on Energy and Commerce
Subcommittee on Energy, Subcommittee on Environment and Climate Change
July 14, 2021

Thank you for the opportunity to testify today. It's great to be back with my colleagues to discuss NRC's important work.

I want to take a few minutes to focus on three pressing challenges affecting NRC: the fight against climate change, the response to the Covid-19 pandemic, and the pursuit of environmental justice.

Policymakers and the public are increasingly focused on climate change and on dramatically reducing carbon emissions. The urgency and scale of the climate challenge have led to a public debate about the available emission-reduction technologies and the role of nuclear power. Obviously, NRC is not charged with setting broad energy policy. We don't get involved in decisions about electricity market design, carbon pricing, or electricity generation portfolios. Our focus is on ensuring the safety and security of whatever amount of nuclear power is used. But I think it's clear that meeting ambitious climate goals will involve nuclear power. I see NRC's nexus to climate change in two main areas: the operating fleet and new reactors.

For the long-term operation of existing nuclear power plants, NRC's role is to provide strong safety and security standards and rigorous independent oversight. In recent years, there has been a counterproductive emphasis on reducing inspections, cutting costs, and creating ever more restrictive constraints on agency action. In my view, we need to re-focus on safety and the basic value of oversight. Instead of contemplating reductions in the frequency or number of vital safety and security inspections, we need to pursue changes that will improve NRC oversight, not weaken it.

The Reactor Oversight Process has generally been an effective safety framework. If we're going to make a particular change, there should be a solid safety case for the change. We should not adjust safety standards or oversight based mainly on cost considerations. This program affects every operating reactor in the country, and we need to firmly focus on the safety and security impacts of our decisions.

Of course, NRC needs to be open to – and ready for – new technologies that could improve safety. Whether it's digital instrumentation and control, accident tolerant fuels, sensors, advanced manufacturing techniques, or artificial intelligence, we need to establish a reliable regulatory framework for reviewing these technologies, while ensuring that they are adopted safely without introducing any unacceptable risks.

The other main climate-related role for NRC is the licensing and oversight of new reactors. Right now, our main goal is to establish the right regulatory framework for the review and safe operation of new technologies, such as advanced reactors. NRC's current power reactor regulations were written for light-water reactors, which make up the entire existing fleet. It makes sense to update those requirements to address different technologies.

New reactor designs have the potential to be safer than existing designs. The challenge is striking a reasonable balance between taking into account the value of new safety attributes and maintaining a prudent degree of defense-in-depth. Some elements of NRC's existing

regulations for large light-water reactors will not be appropriate for non-light-water reactors. Other requirements reflect enduring defense-in-depth principles that should apply to advanced reactors, such as the need for appropriate emergency planning and siting. This is especially true for new technologies with little or no operating experience.

As Chairman Hanson noted, responding to the Covid-19 pandemic has been another major priority for the agency. To continue our work, the agency has been largely operating virtually, with almost all of the headquarters and regional staff teleworking. Fortunately, we've had the IT in place to carry on effectively.

The toughest balance for NRC to strike has been on inspections. For the first few months of the pandemic, we were conducting very few in-person safety and security inspections and resident inspectors were onsite far less than usual. The resident inspectors are now getting back onsite more frequently and the regions are getting back to in-person team safety and security inspections. I think it's a very positive development that the staff has set a goal of getting back to normal levels of oversight this year.

During the pandemic, some inspections were performed remotely out of necessity. I see that as a temporary measure that made sense during an extremely unusual and challenging public health emergency. As we move into the new normal in the coming months, I think there is broad agreement on the value of and need for in-person safety and security inspections. There's no substitute for having independent NRC inspectors onsite.

NRC must also pursue environmental justice. We must meet the moment and be ambitious. We cannot settle for doing things the way they have always been done. We need to ask tough questions about our programs and procedures to understand if they are serving disadvantaged communities -- or instead creating barriers for them to overcome.

I'm excited that the Commission unanimously tasked the staff with performing a systematic review of whether environmental justice is appropriately considered and addressed in the agency's programs, policies, and activities. My expectation is that the staff will consult with a broad range of stakeholders and develop recommendations to improve how the agency pursues environmental justice. Our goal should be to achieve significant, tangible results in the areas of equity and environmental justice.

We have a lot of work ahead of us. But I am confident that NRC will do its part to tackle these challenges. Thank you, and I look forward to your questions.