U.S. Nuclear Regulatory Commission Chair Christopher T. Hanson Remarks for Joint Briefing with IRSN on Bilateral Cooperation in Nuclear Safety November 30, 2022

Excellencies, honored guests, and colleagues: Good afternoon.

It is my pleasure to discuss the collaboration between IRSN and the NRC. Both organizations have a large and dedicated staff conducting research activities that support the nuclear regulatory decisions made in each country. Having confidence in our decisions, and supporting public confidence in them, requires constantly taking into account both operating experience and cutting-edge research. Our decisions must be scientifically sound, and the cooperation between the NRC and IRSN helps justify our conclusions.

Our cooperation has been ongoing for many years, since 2002 with IRSN and before that with its predecessor organizations. In fact, our first cooperation agreement with France on nuclear safety research started back in 1974 and has continued ever since. We are looking forward to celebrating 50 years of bilateral cooperation in 2024.

We just renewed our framework that allows for such cooperation in August. In the photo, you can see Director General Niel pictured with the NRC's Executive Director for Operations and the head of our Office of Nuclear Regulatory Research. I note that the NRC also has a long history of cooperation with France's regulator, the Nuclear Safety Authority, led by President Bernard Doroszcuk.

Our cooperation with IRSN has grown considerably over the years and now spans almost 60 discrete technical research projects. These activities include both experiments and modeling. For example, you can see in the photo an experiment that tests high voltage accidents and how they can start or spread fires in a power plant. Such work helps us validate our requirements for fire protection.

We also work together to study material aging, which is especially important as our existing fleets continue to grow older but are still relied upon for the carbon-free electricity that is powering our countries. We need to understand how reactor components perform as they get older, and the similarities between French and U.S. reactors makes our cooperation a natural fit – and working together makes us both more efficient and more effective.

In addition to practical experiments and studies, we also use and maintain a large number of computer codes that allow us to model behaviors of reactors. This helps us to both understand standard operation and simulate possible accident scenarios to ensure our regulations are appropriate to protect public health and the environment.

Finally, I want to mention our collaboration on emergency preparedness and environmental modeling, such as predicting the spread of radioactivity in an accident. These responsibilities also include our colleagues at the U.S. Department of Energy.

This experience has been used in our support to and analysis regarding Ukraine and in various international emergency response exercises with a wide variety of foreign partners. All these activities are essential and demonstrate the breadth and value of our bilateral cooperation.

I hope and fully expect our cooperation will continue for years to come, and now turn over to Director General Niel to talk about our future opportunities.