

SMARTER NUCLEAR REGULATIONS PROTECT OUR CLIMATE

NUCLEAR CARBON-FREE ENERGY

- ▶ There is a clear consensus that to address the changing climate, the U.S. must maintain its existing nuclear fleet and usher in new nuclear carbon-free technologies.
- ▶ Smarter regulations enable plants to focus on things that improve safety the most and will keep the largest carbon-free energy source on the grid, protecting the climate.
- ▶ Modernized regulations will allow plants to safely operate more efficiently and be cost-competitive with other carbon-free energy sources like wind and solar.
- ▶ A reformed, safety-focused regulatory framework is critical for the development and deployment of the innovative nuclear technology necessary to generate carbon-free electricity and help meet climate goals.



CURRENT REGULATIONS

- ▶ A static regulatory framework is a barrier to innovation and modernization.
- ▶ New technology that could dramatically improve safety can be mired in antiquated processes, wasting time and money for current and new reactors.
- ▶ Current regulations also do not take into consideration data that demonstrates the outstanding safety and operations of the U.S. nuclear fleet. The NRC's own research shows that U.S. reactors are 100 times safer than previously understood, when compared to the agency's established safety goals.
- ▶ In addition to the NRC, nuclear plants have multiple external and internal layers of oversight. These include the Institute of Nuclear Power Operations, which independently holds operators accountable to the highest levels of safety and reliability.



THE SOLUTION

- ▶ By prioritizing the most safety-significant aspects of plant design and operations, the NRC is doing its job as an independent, modern regulator. The agency must evolve its approach as the industry it regulates evolves.
- ▶ When it comes to our current plants, the NRC is systematically evaluating a 20-year-old inspection program to ensure they focus on what matters most in terms of safety. Refocusing inspection efforts is necessary because the inspectors and plant operators have become more experienced.
- ▶ For advanced reactors, the NRC needs to speed up its review of new technology, given the urgency of climate change. The use of outdated regulatory approaches has led to a review process that is too slow and will likely be prohibitively expensive for future reactor designers.

