Contribution ID: **291** Type: **Oral**

Security for New Reactors

The U.S. Nuclear Regulatory Commission (NRC) has a strong and robust security regulatory framework, which contains both performance-based and prescriptive requirements. That framework was designed with traditional large light water reactors in mind. The NRC staff anticipates that new reactor applicants and licensees will consider safety and security requirements early in the design process, such that they will effectively resolve security challenges through facility design, engineered security features, and mitigation measures with little or no reliance on human actions. Certain requirements in the existing framework may benefit from a graded approach to better match a facility's risk profile. The NRC is considering whether to add alternative physical security requirements for small modular and advanced reactor applicants and licensees to its existing security framework. Separately, the agency is proposing to add a new part to its regulations that would establish an optional, risk-informed, technology-inclusive framework for new commercial nuclear power plants (NPPs). Both proposed rulemakings contain voluntary measures and risk-informed approaches to address a comprehensive range of security disciplines, including physical security, cybersecurity, fitness for duty, and access authorization, that may be used by an applicant based on the results of a radiological consequence analysis. The paper provides an overview of NRC's proposed changes to its existing physical security regulatory framework to better accommodate new NPP facilities.

Country OR International Organization

United States

Email address

travis.leach@nrc.gov

Confirm that the work is original and has not been published anywhere else

YES

Author: LEACH, Travis (NRC)

Presenter: LEACH, Travis (NRC)