

STATEMENT OF  
SCOTT MORRIS, REGION IV ADMINISTRATOR  
UNITED STATES NUCLEAR REGULATORY COMMISSION  
TO THE  
HOUSE COMMITTEE ON OVERSIGHT AND REFORM  
SUBCOMMITTEE ON ENVIRONMENT  
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Good morning, Chairman Rouda, Ranking Member Comer, and distinguished Members of the Subcommittee. My name is Scott Morris, and I am the Administrator of the U.S. Nuclear Regulatory Commission's (NRC) Region IV office based in Arlington, Texas. I am a 26-year veteran of the agency and a retired U.S. Navy nuclear submarine officer.

I appreciate the opportunity to appear before you today to discuss the NRC's role and responsibilities associated with the oversight of high-level radioactive waste. High-level radioactive waste must be handled and stored in a manner that adequately protects public health and safety and is not inimical to the common defense and security. In my testimony, I will describe what constitutes high-level radioactive waste, provide an overview of the status of licensing a permanent deep geologic repository, share the status of licensing reviews associated with proposed interim storage solutions, and explain the NRC's licensing process and oversight of the handling and storage of high-level radioactive waste at the Nation's current and former commercial power reactor sites.

High-level radioactive waste includes highly radioactive materials produced by nuclear reactors, such as spent (or used) reactor fuel.

The Nuclear Waste Policy Act of 1982, as amended, provides that the NRC is the independent regulator for the design, construction, operation, and eventual closure of a geologic repository for the permanent disposal of high-level radioactive waste at Yucca Mountain, Nevada. The Act

provides that the U.S. Department of Energy (DOE) is responsible for siting, constructing, and operating the geologic repository. DOE submitted an application to the NRC in 2008 to construct and operate a geologic repository at Yucca Mountain. The NRC completed its safety evaluation report for the Yucca Mountain application in January 2015, and it completed a supplement to DOE's final environmental impact statement in May 2016. Regarding a potential construction authorization, the NRC staff concluded that DOE's application met all applicable requirements for issuance of the construction authorization except certain requirements related to land use and water use. The adjudicatory hearing associated with the application was suspended in 2011. A decision on whether to authorize construction of the geologic repository can only be made after the NRC completes the adjudicatory hearing and the Commission completes its review of contested and uncontested issues. Should DOE be granted the construction authorization, the NRC would oversee and inspect facility construction. A separate license would be required from the NRC for waste handling and eventual repository closure.

The NRC has received two applications for consolidated interim storage facilities – one that would be located in Texas from Waste Control Specialists in April 2016 and a second one that would be located in New Mexico from Holtec International in March 2017. The NRC accepted the Waste Control Specialists application for review in January 2017 and the Holtec application in February 2018. The NRC temporarily suspended its review of the Waste Control Specialists application but resumed its review in June 2018 following the purchase of the company and submission of a revised application by the new applicant, Interim Storage Partners, LLC. The NRC staff currently anticipates completing its review and issuing final licensing decisions on the Holtec application in July 2020 and on the Interim Storage Partners application in August 2020. Those schedules depend on the completeness of answers to staff questions on the applications and whether evidentiary hearings are held. Last month, an NRC Atomic Safety and Licensing Board denied requests by several organizations seeking a hearing on the Holtec

application. The Licensing Board's decision may be appealed to the Commission. A separate Licensing Board will hold arguments next month regarding hearing requests that are pending on the Interim Storage Partners application.

Until a permanent repository or a consolidated interim storage facility is operational, NRC licensees may store spent fuel in spent fuel pools and/or dry cask storage. The NRC has determined that both methods of storage are adequate to protect public health and safety and the environment. The casks can be stored in vertical, horizontal, or underground systems at the plant site, known as Independent Spent Fuel Storage Installations, or ISFSIs. Spent fuel storage is governed by NRC regulations that establish, for example, requirements for radiation shielding, heat removal, and prevention of criticality. The NRC also performs a safety review of all spent fuel storage cask system designs before they are certified for use. As part of this review, the NRC staff reviews cask system storage designs for protection against natural phenomena, such as seismic events, tornados, and flooding; dynamic effects, such as airborne debris or accidental drops of storage and handling equipment; and hazards to the storage site from nearby activities.

In addition, before any casks are loaded with spent fuel, inspectors with expertise in ISFSI operations assess the adequacy of planned licensee activities and the as-built system design. NRC inspectors observe initial cask loadings and subsequently perform periodic inspections of routine ISFSI operations, including monitoring subsequent loading of spent fuel into casks. Inspectors verify that casks have been properly loaded by direct observation and/or reviewing records.

If a safety issue or failure to comply with NRC or plant requirements is identified, the NRC requires corrective action by the licensee and may also take enforcement action.

NRC regulations do not specify a maximum time for storing spent fuel. The Commission has determined that spent fuel can be stored safely in a pool or dry cask for at least 120 years. Dry storage casks are licensed or certified for up to 40 years, with possible renewals in intervals of up to 40 years. The NRC also has requirements to ensure that licensees implement an aging management program for their spent fuel storage.

Spent fuel shipments are regulated by both the NRC and the U.S. Department of Transportation (DOT). The NRC evaluates and certifies the design of the shipping casks, while DOT regulates the vehicles (trucks or railroad) and drivers. The NRC has certified various systems for the safe and secure transportation of spent fuel from commercial power reactors.

In conclusion, NRC licensees are safely handling and storing spent fuel, and the agency will continue to provide oversight to ensure adequate protection of public health and safety and the environment. Chairman Rouda, Ranking Member Comer, and distinguished Members of the Subcommittee, this concludes my written testimony. Thank you for the opportunity to appear before you, and I would be pleased to respond to your questions.