

Global Field Services – Americas/Asia

Spent Fuel Dry Storage Services

Background

Westinghouse is a market leader in providing services and technology to utility customers who are managing their independent spent fuel storage installation (ISFSI). ISFSI operations and canister-loading campaigns continue to be low margin for error for operating utilities and will remain as challenging for end of life plants. Westinghouse has a response to meet this challenge.

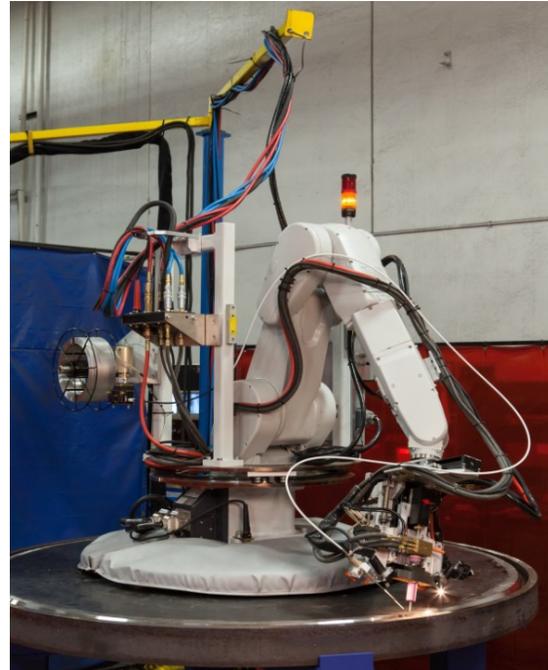
Description

Westinghouse provides utilities up-front planning to prepare them for fuel transfer well ahead of required milestone objectives with all of the services necessary to transfer spent nuclear fuel from the spent fuel pools to any dry cask storage system currently licensed for use by the U.S. Nuclear Regulatory Commission (NRC). These services range from planning and executing the complete canister-loading/transfer campaign to individual niche services, such as fuel characterization, fuel-handling operations and canister-closure welding. With this approach, utilities can significantly lower their Total Owner Costs, overall annual operating costs and quickly reduce their nuclear liability.

Westinghouse personnel have the required capability, backed by years of experience, to successfully provide these diverse services to utilities in the United States and worldwide.

Benefits

With our in-house designed and developed canister welding system (Terminator), Westinghouse is leading the nuclear industry in canister welding services. The system is modular and comprises a combination of standard items and custom-designed and fabricated components with quick-disconnect capabilities. It is easily adapted to any spent fuel canister currently licensed by the NRC. In addition, the welding system uses a high-deposition weld with the hot-wire process. This process translates to less time



Westinghouse's canister welding systems have been used to perform nearly 1,000 successful canister closures in the United States.

spent welding, which not only saves personnel dose, but also minimizes heat input to the weld.

As an innovation company, we are constantly enhancing the technology available to the industry. Our recent release of the Terminator 2 Canister Welding System is a prime example. This new state-of-the-art design incorporates a robotic welding arm that "learns" the canister layout; adapting to the different configurations with layout memory for efficient weld reproduction. Also incorporated in the new design are several safety features such as a maintenance position to prevent foreign material in the annulus area and automatic interaction shutdowns.

In addition to canister welding, Westinghouse is a leading supplier of a host of spent fuel applications in the nuclear industry. Whether the need is for fuel sipping to confirm fuel rod integrity or responding to emergent machine issues

associated with canister connections, Westinghouse can offer the best solution for any spent nuclear fuel storage challenge.

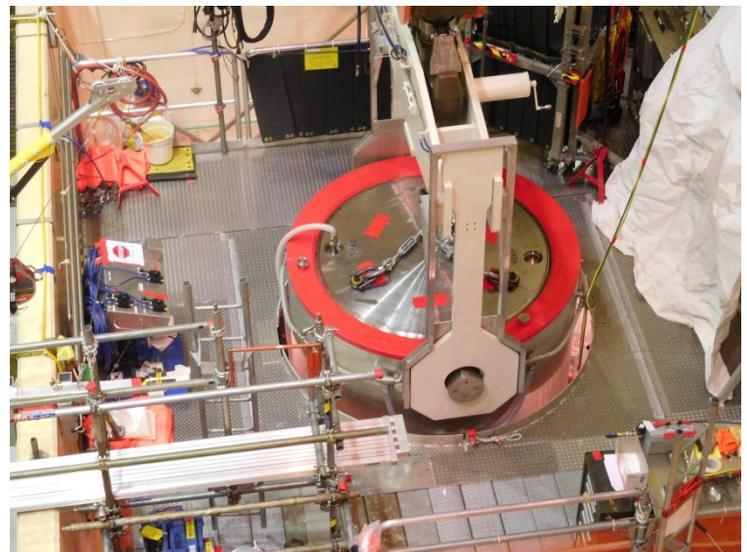
The Westinghouse team of dry-cask storage experts provides specialized services and experienced technicians to assist utilities with specific activities. Westinghouse also provides pool-to-pad cask-loading services and training services in our state-of-the-art Chattanooga, Tennessee (USA) facility.

Experience

Westinghouse has performed fuel characterization and spent nuclear fuel dry-storage handling activities for dozens of customers at numerous sites within the United States and abroad. We are experienced in these services, having supervised and participated in major canister implementation and loading projects, including loading more than 100 canisters and welding over 1000 canisters of almost every NRC-approved spent fuel canister design to date. In addition, Westinghouse stands ready to transfer loaded spent nuclear fuel canisters to off-site transport systems, should centralized interim storage locations become available.



Westinghouse U.S. BWR Service Center in Chattanooga, Tennessee (USA)



The Westinghouse Dry Cask Services team performs a cask handling dry-run