Nuclear Services/Field Services

Spent Nuclear Fuel Dry Storage Services

Background
Since a permanent national repository for commercial spent nuclear fuel (SNF) is not yet available in the United States, many utilities have decided to design, license and construct independent spent fuel storage installations (ISFSIs). ISFSI operations and canister loading campaigns further challenge the fixed resources for utilities.

Description
Westinghouse can provide utilities with all of the services necessary to transfer SNF from spent fuel pools to a dry cask storage system. These services can include complete turnkey responsibility for a canister loading/transfer campaign to niche services, such as fuel-handling operations and canister-closure welding. This allows the utility to lower costs by offsetting increased short-term manpower and training costs for performing canister loading in-house. Westinghouse team members are experienced in this service, having supervised and participated in major canister projects for three decommissioned sites, including loading more than 100 canisters and welding more than 30 canisters of different manufacturers. In addition, Westinghouse is ready to transfer loaded SNF canisters to off-site transport systems when the U.S. national repository (presumably Yucca Mountain) opens.

Westinghouse has the capabilities and experience required to successfully provide these diverse services to utilities in the United States and globally.

Benefits
Westinghouse’s Automatic Canister Closure Welding
Westinghouse’s automatic canister welding system is a modular design comprising a combination of standard items and custom-designed and fabricated components with quick disconnect capabilities. Westinghouse’s welding system can be adapted to any commercially available spent fuel canister on the market. Westinghouse utilizes either a cold- or hot-wire approach, depending on estimated time-to-boil factors.

In addition to canister welding, Westinghouse is a leading supplier of a host of welding applications in the nuclear and other heavy industries.
Experience

Westinghouse team members have performed SNF dry-storage handling activities for dozens of customers, and have completed nearly 300 production canisters to date at numerous sites within the United States. Additionally, Westinghouse has performed SNF inspection and repair services for most Pressurized Water Reactor Owners Group (PWROG) sites.

Fuel handling, Inspection and Repair

Westinghouse will stay on top of industry issues and provide the best solution for SNF storage challenges.

Cask and Canister Loading Services

The Westinghouse team of dry-cask storage experts provides specialized services and experienced technicians to assist utility organizations with specific activities. Westinghouse can also provide complete turnkey project implementation, including pool-to-pad cask-loading services.