

## **D37. DRY TRANSFER SYSTEM FOR SPENT FUEL: PROJECT REPORT**

Use of an on-site dry transfer system (DTS) allows nuclear facilities with limited crane capacities or other plant restrictions to take advantage of large efficient storage systems. By using this system, fuel can be transferred from loaded storage casks to transport casks without returning to their fuel storage pool.

The project involves the U.S. Department of Energy (DOE) and EPRI, reflects the high interest both organizations have in the development of a transfer system. Earlier work performed for EPRI showed that a small cask to large storage cask fuel-transfer system to overcome existing limitations was feasible. In addition, many storage systems are not transportable. As plants start to be decommissioned, it may be necessary to transfer fuel from storage casks to transportation casks without returning to a spent fuel pool. A dry transfer system could be used to transfer fuel assemblies from storage casks or small transfer casks to MPCs in transport or storage overpacks. The dry transfer system design incorporates a building structure, which provides both shielding and particulate confinement. All equipment is conventional, and it has been proven effective in other nuclear applications. Reliability is improved by designing equipment such that operations can be continued in the event of a failure of any individual component within the system. The design is judged to comply with the safety requirements and appears to be economical to construct and operate.

The project represents a major commitment by both the U.S. DOE and EPRI to develop a practical, dry transfer facility. The ultimate viability of the design will be known when a facility is actually built and operations demonstrated.

*For more, "Dry Transfer System for Spent Fuel: Project Report," EPRI TR-105570, Final Report, December 1995.*