

## **D8. ASSESSMENT OF A LOW-LEVEL WASTE OUTSIDE STORAGE PAD DESIGN METHOD**

EPRI has developed a method for designing an outside pad and modules for interim on-site storage of low-level waste.

The Low level Radioactive policy Act of 1995 defined a timetable for states to provide disposal of low-level radioactive waste (LLW). Many regions of the country have yet to site such facilities due to technical and permitting delays. For nuclear power plants without regional disposal facilities, it is likely that interim on-site storage of LLW will be employed at some time during their operating life until permanent disposal is available.

EPRI developed a series of reports on the subject of Interim On-Site Storage of Low-Level Waste, it provides a detailed method for selecting an appropriate storage facility design and determining its cost.

Investigators collected engineering design and cost information from Boston Edison for its Pilgrim Nuclear Power Station outside pad and modular LLW storage facility. They compared the Boston Edison estimate to EPRI-developed data, including the facility description, design basis, cost evaluation, and radiological dose assessment. They also reviewed Boston Edison's application of EPRI's design criteria and guidelines for such facilities. The evaluation of data showed that the direct costs estimate projected using EPRI's method was in excellent agreement with the figures derived by Boston Edison for the Pilgrim facility.

The assessment conducted determined the usefulness of EPRI's Facility Design Options method for selecting the proper LLW storage facility design and determining whether the estimated cost will agree with actual utility experience. EPRI's method also allows quick preliminary assessment of the conceptual design and cost of a steel frame/metal-sided building and a reinforced concrete building.

*For more, "Assessment of a Low-Level Waste Outside Storage Pad Design Method," EPRI TR-105891, Final Report, December 1995.*