Status of Back End of Nuclear Fuel Cycle in the United States of America: Current R&D Program

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Because currently there is no operating deep geologic repository in the United States of America (US)for the permanent disposal of spent nuclear fuel (SNF) from commercial energy generation, nuclear utilities are storing the fuel on site. Utilities are generating approximately 2,200 metric tons of SNF per year and with storage pools at capacity, the fuel is being loaded in large dry-storage dual-purpose canisters. In this paper, we will summarize the current status of the management of commercial SNF in the US, its implications on future SNF management strategies, and the related ongoing research and development program in storage, transportation and disposal of SNF.

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