

# International Conference on Management of Spent Fuel from Nuclear Power Reactors: An Integrated Approach to the Back End of the Fuel Cycle



Contribution ID: 90

Type: POSTER

## Laying the Groundwork for a Large-scale Used Fuel Transportation System

The US Department of Energy Office of Nuclear Energy established the Nuclear Fuels Storage and Transportation Planning Project to lay the groundwork for implementing an interim storage facility, including associated transportation activities. Efforts include the development of a system for the large-scale transport of spent nuclear fuel that will be necessary in an integrated waste management system. Progress is being made on long lead time, destination-independent aspects of the transportation infrastructure. The large-scale transportation system for spent nuclear fuel is divided into three elements: institutional, operational, and hardware. The institutional element refers to the various forms of stakeholder interaction that must occur for this type of transportation system to be successful. It includes activities like development of a national transportation plan, work on policy development for Section 180(c) of the Nuclear Waste Policy Act, and identification of a preliminary suite of national transportation routes that reflect the interests of a broad cross section of stakeholders while meeting regulatory requirements. The operational element refers to the activities that must be undertaken to run a large-scale transportation system. This element is currently focused on development of a new SNF transportation routing analysis tool, study of the infrastructure near SNF storage sites that may be de-inventoried first, and development of tools for modeling transportation activities. The hardware element refers to the casks, railcars, and other items necessary to operate the system. This element currently focuses on development of railcars compliant with Association of American Railroads Standard S-2043, as well as studies related to the use of rail casks and their ancillary equipment. The Nuclear Fuels Storage and Transportation Planning Project is making significant progress in all three of these areas along the path forward to a fully operational transportation system.

### Country/ int. organization

United States

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