FOR FURTHER INFORMATION CONTACT: Michelle Miskinis, (202) 634–4413. SUPPLEMENTARY INFORMATION: A dry transfer system has several significant applications and could benefit the Federal waste management system and utilities in a number of ways. It has the potential to:

(1) Allow recovery operations at shutdown reactor sites with independent spent nuclear fuel storage installations.

(2) Provide a means for utilities that can presently handle only a truck cask to utilize a rail cask.

(3) Permit the deployment of the larger capacity 125 ton MPC at reactor sites that would otherwise be limited to the 75 ton MPC.

(4) Allow transfers of spent nuclear fuel from existing utility on-site storage casks/canisters into MPCs without returning to the reactor storage pool.

(5) Support existing or future Department of Energy and Office of Civilian Radioactive Waste Management spent nuclear fuel management activities.

The Draft Project Design Report for the dry transfer system is expected to be completed by August 1, 1995. It will contain cost estimates for an operational system. The Topical Safety Analysis Report will be submitted to the Nuclear Regulatory Commission in early 1996. Upon approval, the topical report is expected to be referenced in subsequent site specific licensing applications for use of the dry transfer system in atreactor applications and independent spent fuel storage installations.

The DOE desires that a Nuclear Regulatory Commission approved dry transfer system be available by 1998 to support potential program needs. Therefore, we are requesting electric utility companies and other private and public entities to provide us with information regarding their interest in participating with the DOE in a cooperative project for prototype fabrication and demonstration of a dry transfer system that is based on the DOE/EPRI design. Because site specific use of the system will require approval by the Nuclear Regulatory Commission, the licensing phase of the project may be pursued independent of prototype fabrication and demonstration activities.

This project is contingent upon the availability of appropriated funds.

A summary description of the dry transfer system is provided below.

Description of DOE/EPRI Dry Transfer System

The DOE/EPRI designed dry transfer system consists of a facility to perform cask preparatory activities and provide shielding during spent nuclear fuel transfer operations. Appropriate operations and support systems are included. Key operational systems, e.g., the spent fuel handling and transfer subsystems, are being designed by SGN (Societe Generale pour les Techniques Nouvelles) under a subcontract with Transnuclear, Inc. and incorporate technology and experiences from French dry spent fuel transfer operations at La Hague. Spent fuel handling experiences at Federal and commercial facilities in the United States also have been factored into the design.

The base dimensions of the facility will be approximately 40×60 feet with a height of approximately 45-50 feet. It consists of a Preparation Area, a Lower Access Area and a Transfer Confinement Area. The Preparation Area is a sheet metal building where casks are prepared for unloading, loading or shipment. The Lower Access Area and Transfer Confinement Area are the first and second floor, respectively, of a concrete cell which has walls approximately 3 feet thick. The sheet metal building abuts the concrete cell which allows casks to be moved into the Lower Access Area from the Cask Preparation Area. A large shield door separates the Preparation Area from the Lower Access Area. The Lower Access Area and the Transfer Confinement Area are separated by a floor containing two portals in which the casks are aligned. The fuel handling machine is located in the Transfer Confinement Area and moves fuel assemblies from one cask to the other. On the roof of the Transfer Confinement Area is a crane dedicated to handling cask shield plugs and lids. The crane can be operated manually for off-normal recovery. The heating, ventilation and air conditioning (HVAC) systems are balanced to ensure airflow from the Preparation Area (uncontaminated) to the Lower Access Area, to the Transfer Confinement Area (potentially contaminated). The control room and HVAC systems are separate from the facility and are envisioned to be portable, i.e., housed in a trailer or van. The transfer operations are performed remotely, however, maintenance on the facility equipment is manual.

The fuel handling machine includes a single fail safe crane and a transfer tube that contains the spent nuclear fuel assembly during the transfer operations. At the bottom of the transfer tube is a "crud catcher" which closes when the spent fuel assembly is in the transfer tube. The device catches crud during transfer and prevents the spreading of contamination in the Transfer Confinement Area. When the spent fuel transfer tube is aligned with the receiving cask, the device opens and any accumulated crud falls into the receiving cask, e.g., the MPC. There will be two monitoring systems in the facility to ensure proper grappling of the fuel: (1) A video monitor and (2) a series of switches, to assure that the operator knows the position of the fuel at all times. The fuel handling machine can be operated manually from the facility catwalks for off-normal recovery.

A unique feature of the dry transfer system is that all major components are transportable, except the concrete cell. The spent fuel handling equipment, for example, as well as the floors and roof are designed to be lowered-in and raised-out through the top of the cell. This feature is economically attractive because it enables the same dry transfer system equipment to be used at different locations.

Letters of Interest

Sources may indicate an interest in one or all phases of the project, i.e., prototype fabrication, demonstration and site specific licensing.

Sources interested in being considered for participation in this effort should forward a letter of interest referencing this Federal Register notice to the address shown above. Letters of interest must include the following information pertaining to the offeror's ability to perform: (1) Previous experience in the fabrication, construction or licensing of equipment and facilities in accordance with ASME NQA-1 or Nuclear Regulatory Commission requirements, and experience in the management of spent nuclear fuel, (2) relevant professional qualifications and specific experience of any key personnel who may be assigned to the project, (3) availability and description of special facilities that may be required in the fabrication or demonstration of the system, and (4) any additional pertinent information concerning the offeror's qualifications to perform the work. Letters of interest should not be submitted by companies which do not possess the capabilities required for the appropriate project phase or phases. Letters of interest should not exceed 10 pages.

Additional information may be requested by the Department of Energy following receipt of any letter of interest. This notice should not be construed as a commitment by the Department of Energy to enter into any agreement, nor is it a Request for Proposal.