

**PROGRAM PLAN FOR**  
**VULNERABILITY ASSESSMENT**  
**FOR SPENT FUEL DRY STORAGE FACILITIES**

**Purpose:** In FY 2002, in response to the events of September 11, 2001, develop a systematic reassessment of existing and proposed spent fuel storage facilities and dry storage casks to determine their vulnerability to potential sabotage and terrorist events. The reassessment involves the use of complex analytic methods and data collection to model the expected consequences from potential sabotage and terrorist events, and to develop protective measures where needed.

During FY 2002 through the first quarter of FY-2004, SFPO will assess the vulnerability of spent fuel storage casks and facilities to potential sabotage and terrorist events. The effort will involve analytical techniques and data gathering, response to Congressional and Public concerns, and initiation of rulemaking, should changes in the current regulations be deemed necessary. Specific issues to be addressed include, but are not limited to the following:

- A. Vulnerability of ISFSIs and individual dry storage casks to air crashes
- B. Vulnerability of dry storage casks to *Ex 2* such as *Ex 2* and *Ex 2*, and other weapons that could be acquired by potential terrorists.
- C. Changes to regulations and guidance to provide additional security measures to protect ISFSIs and individual dry storage casks, as warranted.
- D. Review of licensee changes to physical security plans or cask designs made in response to changes in physical security regulations.

Applying the set of terrorist threats and scenarios identified by the Commission (e.g., Threat-X) and the intelligence community, the staff will assess the vulnerability of spent fuel dry storage systems in terms of potential loss of function(s) of those systems. If vulnerabilities are identified, their consequences will be assessed, options for additional protective measures to reduce these vulnerabilities will be identified, guidance to first responders will be identified, changes in Commission policies will be identified, and an evaluation will be performed with appropriate backfit assessments (if required) to arrive at recommended

*Ex 2 portions*

*E/119*

STORAGE SYS	Trans Nuclear TN 68	Holtec HI-STORM 100 32/68	BNFL-FS VSC-24	TransNucWest NUHOMS 24P/52B
THREAT	NOTE 1	NOTE 2	NOTE 3	NOTE 4
	Bounded by Truck X unless the target distance is much less based on perim. security	Bounded by Truck X unless the target distance is much less based on perim. security	Bounded by Truck X unless the target distance is much less based on perim. security	Bounded by Truck X unless the target distance is much less based on perim. security
	Bounded by Plane X	Bounded by Plane X	Bounded by Plane X	Bounded by Plane X

NOTE 1: Represents a combined transport and storage system with no separate overpack and canister. Vertical carbon steel vessel with bolted flanges on the confinement barrier lid that has double metallic O-ring seals with volume in-between under constant helium pressure. Body of confinement vessel is welded nickel alloy steel plate for pressure vessels. Outer shield of pressure vessel carbon steel forging for gamma shield. An outer borated polyester layer

Ex 2 portions