

*Rec'd
7:00 AM
1/29/02*

From: Christopher Bajwa
To: Robert Shewmaker
Date: 1/28/02 4:38PM
Subject: Revision to Program Plan

Bob,

Enclosed is a "Rev 1" of the program plan. If this looks good to you, feel free to run with it. If you prefer you original, that is fine, too.

I did a little formatting of the text, and changed wording in some of the sections to try to make it read a little better. You will have to determine if the changes I made have the sought-after effect. :)

-Chris

Areas of changes recommended by Jack

Review all

C/S

Draft 1/28/02

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

Purpose: Given a description of potential terrorist threats, develop a series of event scenarios and assess the vulnerability of spent fuel dry storage systems to those event scenarios in terms of potential loss of confinement and radioactive release. If vulnerabilities are identified, additional protective measures to reduce these vulnerabilities will be identified and evaluated to support recommended actions.

Threats: Terrorist threats as identified in Attachment #10 of RTA Scoping Paper to the Commission, dated 11/28/01, or as later directed.

Scenarios: Event scenarios for use in this vulnerability assessment will be developed by safeguards and security personnel from the terrorist threats identified above.

Scope: All spent fuel dry storage systems with a certificate of compliance or utilized under a site specific license shall be considered for this vulnerability assessment. A screening process shall be developed to identify specific storage systems that represent the different types of storage systems designs and include the worst case source term contents for each system. The storage systems selected will be used in the detailed vulnerability assessment. A system of logic shall be developed to allow reasonable estimates regarding the vulnerability of specific storage systems not identified for detailed assessment. The systems not selected will be bounded by the systems that are reviewed. Preliminary screening results are included in the attached matrix identifying threats and storage system examples.

Vulnerability Assessments:

Identify the analyses necessary to assess the vulnerability of each selected spent fuel storage unit to each of the defined threat scenarios. Determine whether the necessary analyses will be performed by NRC staff or contractor personnel. The necessary analyses to be performed will address the following subject areas.

Analysis Areas:

- Environmental conditions and loadings created by the threat scenarios
- Whether the confinement boundary of the storage system is breached
- The extent of damage suffered by the stored spent fuel
- Dispersion of radioactive material (if applicable) and resulting doses

Measures of Vulnerability:

- Identification of prompt deaths from radiation and non-radiation sources

- Identification of offsite property damage and cleanup costs
- Identification of latent cancer deaths
- Identification of costs of denial of use of offsite facilities

Recommendations:

Provide recommendations that will result in decreased vulnerabilities. The cost effectiveness of such changes are to be estimated. Areas of possible recommendations include the following:

- Changes to the access authorization requirements and physical protection requirements
- Changes to the required response capabilities of the licensee, NRC, and Federal, state, and local governmental agencies
- Changes in guidelines for the first responders to an event
- Design changes to the spent fuel dry storage system(s)
- Changes to the regulations and policies of governmental agencies

FILE:SFStorVulAssProgPlan