

From: Robert Shewmaker -nmss
To: RTA/SFPO SUPPORT GP
Subject: MTG TODAY (WED, 1/23/02) AT 2:00PM, O-14B10

Please attend if you are available.

AGENDA:

- Discuss mat'l I E-mailed yesterday
- Discuss new mat'l I hope to E-mail before the mtg or hand out at mtg
- Hand out Draft Program Plan and Rpt Outline from Non-Spent Fuel Transportation Group for Format and any content implications for us
- Discuss Program Plan and Rpt Outline development for Spent Fuel Storage Group

Note: The attached is a work in progress so mark up, add, change etc and bring to mtg.

A/12

Draft 1/23/02

**ELEMENTS OF VULNERABILITY ASSESSMENT
FOR SPENT FUEL DRY STORAGE**

POPULATION OF STORAGE CONTAINERS

- Single Container/Cask
- Double Container/Cask and Canister
- Number Now in Use
- Number in Future Use
- Materials of Construction

CONTAINED/STORED SOURCES

- Spent Fuel
- GTCC Material

THREATS/SCENARIOS

- Airborne
- Waterborne
- Truck Bomb
- Insider
- Ground Assault

INDUCED ENVIRONMENT/LOADINGS

- Pressure vs Time
- Temperature vs Time
- Mass and Velocity of Missiles/Objects
- Geometry and Physical Properties of Missiles/Objects

CASK BREACHING

- Cask Failure Modes
 - Gross Overpressure from Undirected High Energy Blast
 - High Energy Jet by Shaped Charge
 - Directed Projectile/Missile from High Energy Blast/Propellant
 - Crash Impact of Deformable Objects
 - Gross High Temperature/Fire
- Breached Cask Opening Size/Geometry
- Internal Cask Conditions Created by Cask Breach

CANISTER BREACHING

- Canister Failure Modes
 - All Cask Failure Modes as Continuation
 - Missiles Generated by Cask Breach

DAMAGE TO CONTAINED/STORED SOURCES

DISPERSAL OF SOURCES

CONSEQUENCES OF SOURCE RELEASES

NOTE: All assumptions used in the vulnerability assessments must be identified.

FILE:ElementsVulnAssess