

11/2/03

## Vulnerability Analyses for Spent Fuel Storage Systems and Transportation Packages

### Key Message:

- NRC in conjunction with Sandia National Laboratories (SNL) are performing vulnerability analyses (VAs) for spent fuel storage systems, spent fuel transportation packages and radioactive material transportation packages.

### Background/Context:

- Assessments are being performed as required by the Chairman's memo Dated September 28, 2001.

### Accomplishments:

- Computer Models. SNL has modeled and run many of the computer models required for the large airplane Crashing into one spent fuel storage cask systems and a spent fuel transportation package. To-date the majority of the bounding analyses show that there have been for a large plane impact. A couple of the bounding cases of the storage cask. Those impact orientations have been reconsidered and realistic impacts have been modeled and those computer models are currently being run at SNL.

### Commission Direction:

- DEDO Guidance from Commission meeting on December 4, 2002. Staff will respond to the guidance in the form of a Commission paper to discuss the staff's plans for future vulnerability analyses.

### Pending Actions:

- Responding to DEDO Guidance
- Finish VAs that are in progress
- Start and finish VAs for threats that have not begun.

### Stakeholders and their Interests:

- Licensees and Certificate Holders. All mitigative measures must be evaluated to determine their effectiveness and potential cost as they relate to potential damage (deaths, both acute and latent) and cleanup cost.

### Challenges:

- Performing analyses unique analysis some, of which, have never been conducted to-

Portions Ex2

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