

Memorandum from Luis A. Reyes to the Commission,  
"Completion of Security Assessments of the Crash of a Large Plane  
into Spent Fuel Storage Casks" September 15, 2005

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**02/12/2008**

**Document 5**

September 15, 2005

MEMORANDUM TO: Chairman Diaz  
Commissioner Merrifield  
Commissioner Jaczko  
Commissioner Lyons

FROM: Luis A. Reyes */RA/*  
Executive Director for Operations

SUBJECT: COMPLETION OF SECURITY ASSESSMENTS OF THE CRASH OF  
A LARGE PLANE INTO SPENT FUEL STORAGE CASKS

In response to the staff requirements memorandum for SECY-04-0222, "Decision-Making Framework for Materials and Research and Test Reactors Vulnerability Assessments," the staff has evaluated the potential consequences of a deliberate crash of a large plane into four spent fuel storage cask designs. This evaluation is part of the staff's ongoing security assessments of spent fuel storage casks, spent fuel transportation packages, and radioactive material (non-spent fuel) transportation packages. The staff briefed the Commission technical assistants on the results of the assessments on June 23, 2005.

The spent fuel storage casks evaluated were the HI-STORM 100, the VSC-24, the NUHOMS®-32PT, and the TN-68. Each storage cask design represents a group of designs. The results would be similar for any design in the same group. The four casks were chosen to represent all currently certified spent fuel storage casks.

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May be exempt from public release under the Freedom of Information Act (5 U.S.C. 552)

Exemption number 2  
Nuclear Regulatory Commission review required before public release.

M. Wayne Hodges, NMSS/SFPO  
Name and organization of person making determination.

Date of Determination 9/ 2 /05

The Commissioners

The structural and consequence assessments were performed for a large-plane impact similar to the September 11, 2001, attacks on the World Trade Center in New York City and the Pentagon in Virginia. (

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ex. 2

Based on these findings, the current security measures, including those enacted since September 11, 2001, are adequate. No additional mitigative measures for a deliberate crash of a large plane into an independent spent fuel storage facility are being recommended by the staff. The staff will formalize these findings in a report to the Commission.

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