

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSIONBEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
PRIVATE FUEL STORAGE, L.L.C.	)	Docket No. 72-22-ISFSI
	)	
(Independent Spent	)	
Fuel Storage Installation)	)	

NRC STAFF'S RESPONSE TO  
LICENSING BOARD'S REQUEST CONCERNING  
THE NUCLEAR ENERGY INSTITUTE'S AIRCRAFT CRASH STUDYINTRODUCTION

During an August 20, 2003 telephone conference to address scheduling matters, the State requested information pertaining to the status of its request to obtain an aircraft crash study that was sponsored by the Nuclear Energy Institute (NEI) and submitted to the Commission as Safeguards Information (SGI). During the telephone conference, the Licensing Board directed that the Staff inform it of any objections it has to the release of the NEI aircraft crash study to the State. The Staff hereby informs the Licensing Board and the parties that it does not object to providing the State access to portions of the NEI aircraft crash study that either: 1) do not contain SGI; or 2) contain SGI and the State has an established "need to know" the information. As discussed below, however, the Staff does object to providing certain portions of the NEI study containing SGI to the State for which an established "need to know" cannot be determined.

DISCUSSION

The Staff in the Office of Nuclear Security and Incident Response (NSIR) has determined that portions of the NEI study do not contain SGI, and the Staff is releasing those portions to the State. For those portions of the NEI study that contain SGI, the access requirements of 10 C.F.R. § 73.21(c) must be followed. Specifically, in order to receive SGI, a person must fall within one of

the categories of persons listed in the regulation and must have “an established ‘need to know’” the information. “Need to know” involves a determination by a person having responsibility for protecting Safeguards Information -- the Staff in this case -- that a proposed recipient’s access to Safeguards Information is “necessary in the performance of official . . . duties of employment.” See 10 C.F.R. § 73.2.

The Staff has reviewed the portions of the NEI study that the Staff has determined contain SGI in order to further determine whether the State has a “need to know” the information. In this regard, the Staff considers that portions of the study may be potentially relevant to issues in the proceeding such that an attorney or consultant to the State would find the information necessary in the performance of official duties of employment. Therefore, the Staff is providing those portions of the document to the State, together with the portions of the document that do not contain SGI. In so doing, the Staff does not waive any objections it may have with respect to the relevancy or the use of the information contained in this document in this proceeding.

The Staff objects to providing to the State certain SGI portions of the NEI aircraft crash study for which the Staff is not able to determine that an established “need to know” exists. These portions of the NEI study have been redacted from the document being provided to the State. The Staff has identified in an attachment hereto the subject matter and chapter references of those portions of the NEI study that contain SGI and, of those, has identified whether a “need to know” exists.

Respectfully submitted,

**/RA/**

Catherine L. Marco  
Counsel for NRC Staff

Dated at Rockville, Maryland  
this 29th day of August 2003

**Categorization of Information Contained in NEI Aircraft Crash Study**

<b>Chapter</b>	<b>Topic</b>	<b>Category</b>	<b>Need to Know</b>
Chapter 1	Objectives	Not SGI	
Chapter 2	General Approach	Not SGI	
Chapter 3	Reference Aircraft Threat	Not SGI	
Chapter 4	Aircraft Loading Characteristics	Not SGI	
Chapter 5	Representative Power Plant Structures Housing Fuel		
5.1	Containment Structures	SGI	No
5.2	Used Fuel Pools	SGI	No
5.3	Dry Used Fuel Storage Systems and Transport Casks	SGI	Yes
Chapter 6	Material Characterization and Failure Criteria Summary	SGI	Yes
Chapter 7	Structural Integrity Evaluations Using Simplified Methods	SGI	No
Chapter 8	Structural Integrity Evaluations Using Force Time History or Missile/ Target Interaction Methods		
8.1	Containment Evaluations	SGI	No
8.2	Used Fuel Storage Pool Structure Evaluations	SGI	No
8.3	Used Fuel Dry Storage Systems and Transportation Cask Evaluations		
8.3.1	Steel Encased Concrete Storage Cask Response	SGI	Yes
8.3.2	Vertical Metal Storage Cask Response	SGI	No
8.3.3	Horizontal Concrete Vault Storage System Response	SGI	No
8.3.4	Rail Car Mounted Transport Cask Response	SGI	Yes
Chapter 9	Summary and Conclusions	As marked	As marked
Chapter 10	Peer Reviews	Not SGI	
Chapter 11	References	Not SGI	
Appendix A	Development of Riera Aircraft Impact Loading Functions	Not SGI	

Appendix B	Aircraft Engine Impact Simulation	Not SGI	
Appendix C	Finite Element Model Description of Structures Housing Fuel		
C.1	Representative Reinforced Concrete Containments	SGI	No
C.2	Representative Pre-Stressed Concrete Containments	SGI	No
C.3	Representative Free-Standing Steel Containments	SGI	No
C.4	Representative BWR Used Fuel Pools	SGI	No
C.5	Representative PWR Used Fuel Pools	SGI	No
C.6	Representative Steel-Encased Concrete Storage Casks	SGI	Yes
C.7	Representative Metal Storage Cask	SGI	No
C.8	Concrete Vault Storage System	SGI	No
C.9	Representative Railcar Mounted Transport Cask	SGI	Yes
Appendix D	Material Characterization and Failure Criteria	SGI	Yes

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CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S RESPONSE TO LICENSING BOARD'S REQUEST CONCERNING THE NUCLEAR ENERGY INSTITUTE'S AIRCRAFT CRASH STUDY" in the above captioned proceeding have been served on the following through deposit in the NRC's internal mail system, with copies by electronic mail, as indicated by an asterisk this 29<sup>TH</sup> day of August, 2003:

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**/RA/**

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