

July 15, 2004

MEMORANDUM TO: Stephen Dembek, Chief, Section 2  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

FROM: Thomas W. Alexion, Project Manager, Section 1 **/RA/**  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JULY 7, 2004, CATEGORY 1 MEETING WITH  
ELECTRIC POWER RESEARCH INSTITUTE (EPRI) ON EPRI TOPICAL  
REPORT TR 1002865, "BASES FOR RIA [REACTIVITY INITIATED  
ACCIDENTS] FUEL ROD FAILURE AND CORE COOLABILITY  
CRITERIA"

On July 7, 2004, representatives of EPRI met with the NRC staff to discuss issues associated with EPRI Topical Report TR-1002865, "Bases for RIA [Reactivity Initiated Accidents] Fuel Rod Failure and Core Coolability Criteria." The revised RIA criteria were developed by EPRI as part of an effort to extend fuel rod average burnup levels beyond the current limit of 62 gigawatt days per metric ton uranium.

The NRC staff presented its recent Research Information Letter 0401 (RIL 0401) on an assessment of RIAs, and EPRI presented RIA criteria and its assessment of RIL 0401 acceptance criteria, in relation to their proposed acceptance criteria. During the presentations, technical information was presented, a variety of viewpoints were expressed, and several points were clarified. The NRC staff's presentation concluded that with current burnup levels, a rod-ejection accident (for pressurized water reactors) and a rod-drop accident (for boiling water reactors) would not result in cladding failure, and therefore, the requirements of General Design Criterion 28 continue to be met. The current challenge is to determine if this finding applies to higher burnup levels. EPRI's presentation concluded that most other countries have adopted separate fuel failure and coolability limits (consistent with TR-1002865) and that it is overly conservative to restrict RIA events to a no fuel failures criterion.

At the conclusion of the meeting, the NRC staff expressed its appreciation to EPRI for its participation in the meeting, and indicated that it is now ready to perform a more detailed review of TR-1002865. The NRC staff indicated that its review has to not only resolve all technical issues, but it also needs to consider how any revised RIA criteria would be addressed in regulatory space (i.e., criteria that are reasonable and inspectable, without unnecessary regulatory burden). The NRC staff indicated that it would contact EPRI in the future to discuss the review milestones and schedule.

S. Dembek

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A list of meeting attendees is attached. The presentation slides are available in ADAMS under Accession Number ML041910449.

Project No. 669

Attachment: Meeting Attendees

cc w/att:

Mr. David J. Modeen  
Vice President and Chief Nuclear Officer  
EPRI  
1300 W. T. Harris Boulevard  
Charlotte, NC 28262

Mr. James Lang, Director  
EPRI  
1300 W.T. Harris Boulevard  
Charlotte, NC 28262

Mr. Warren Bilanin, Director  
EPRI  
3412 Hillview Avenue  
Palo Alto, CA 94304

Mr. Gary L. Vine, Executive Director  
Federal and Industry Activities, Nuclear Sector  
EPRI  
2000 L Street, NW, Suite 805  
Washington, DC 20036

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# MEETING WITH ELECTRIC POWER RESEARCH INSTITUTE (EPRI)

## LIST OF ATTENDEES

JULY 7, 2004

### EPRI

R. Yang  
O. Ozer  
A. Machiels

### Westinghouse

W. Slagle  
D. Mitchell  
I. Rickard  
C. Beard

### OTHER

R. Montgomery (Anatech Corporation)  
J. Rashid (Anatech Corporation)  
K. Folk (Southern Nuclear)  
A. Alapour (Southern Nuclear)  
J. Holm (Framatome ANP)  
B. Tsai (Exelon Generation)  
R. Chang (Southern California Edison)  
A. Strasser (Aquarius Services Corporation)  
E. Rosenfeld (New Jersey Bureau of Nuclear Engineering)

### NRC

T. Alexion  
H. Scott  
J. Voglewede  
P. Clifford  
U. Shoop  
F. Akstulewicz  
R. Meyer  
A. Attard  
S. Marshall  
S. Wu  
G. Thomas  
S. Dembek  
E. Kendrick