

December 1, 2006

MEMORANDUM TO: Stacey L. Rosenberg, Chief
Special Projects Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Tanya M. Mensah, Senior Project Manager **/RA/**
Special Projects Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF NOVEMBER 9, 2006, CATEGORY 3 PUBLIC
WORKSHOP ON INTERIM REACTIVITY-INITIATED ACCIDENTS (RIA)
CRITERIA (TAC NO. MD0705)

On November 9, 2006, a Category 3 public workshop was held between the NRC staff and industry representatives at NRC headquarters in Two White Flint North, 11545 Rockville Pike, Rockville, MD. Representatives from Westinghouse, Areva, General Electric (GE), Electric Power Research Institute (EPRI), EdF (France), HSK (Switzerland), Iberinco (Spain), Duke Energy, Southern Nuclear, Exelon, and Arizona Public Service participated in the workshop. A list of attendees is enclosed. The purpose of this meeting was to seek input from the industry to support the development of interim criteria for RIA. The interim criteria will appear as an update to the Standard Review Plan (NUREG-0800). More detailed information is contained in the following presentation slides which are available in the NRC's Agencywide Documents Access and Management System (ADAMS).

- NRC Presentation Slides (ADAMS Accession No. ML063260213)
- Industry Presentation Slides:
 - General Perspective on Development of Revised RIA Criteria (ADAMS Accession No. ML063190114)
 - Industry Information To Support Interim RIA Criteria (ADAMS Accession No. ML063190105)
 - Westinghouse (ADAMS Accession No. ML063190117)
 - AREVA (ADAMS Accession No. ML063190106)
 - GE (ADAMS Accession No. ML063190108)

During the RIA workshop, each of the fuel vendors (GE, Westinghouse, and Areva) as well as the EPRI made presentations and provided the NRC staff with information related to developing new acceptance criteria. The NRC staff provided a draft of the RIA interim criteria and guidance. Discussions amongst the attendees included the need for a separate coolability criteria and implementation of interim criteria.

The pressurized water reactor (PWR) fuel cladding failure criteria developed separately by the fuel vendors, the EPRI, and the NRC staff was within reasonable agreement. It was determined, based upon presentations from GE, that the boiling water reactor fuel cladding failure criteria should be presented as a function of hydrogen content as opposed to cladding

corrosion (since hydrogen pickup is not well correlated). The NRC staff is looking into whether hydrogen measurements are available on the PWR fuel samples in order to take a similar path.

Differences amongst the core coolability criteria developed by the industry, the EPRI, international regulatory agencies, and the NRC staff were within reasonable agreement at low burnup. The challenge is addressing the potential for fuel dispersal and fuel-coolant interaction. The NRC staff is still developing a regulatory position for these issues.

The radiological assumptions related to fission-product fuel-to-clad gap fractions were also discussed. The NRC staff is developing revised guidance based upon measured fission gas releases during RIA test programs.

Members of the public were in attendance. No public meeting feedback forms were received.

Project Nos. 669 and 689

Enclosure: List of Attendees

cc w/encl: See next page

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ADAMS Package Accession Number: ML063310216

Meeting Notice Accession Number: ML062990185

Meeting Handout Accession Numbers: ML063260213, ML063190114, ML063190105,
ML063190117, ML063190106, ML063190108

Meeting Summary Accession Number: ML063260310 NRC-001

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DATE	11/ 27 /06	11/ 28 /06	11/29 /06	12/ 1 /06

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Tanya Mensah	NRC
Rob Sisk	Westinghouse
Adel Alapour	Southern Nuclear
Charles Beard	Westinghouse
Odelli Ozer	EPRI
Barry Miles	Global Nuclear Fuel (GNF)
Charles Heck	General Electric (GE)
William Slagle	Westinghouse
Al Strasser	Aquarius Services
Bob Tsai	Exelon
Pabb Garcia	Iberinco
David Mitchell	Westinghouse
Robert Rand	GE/GNF
Robert Montgomery	ANATECH/EPRI
Jared Wermiel	NRC
Jerry Holm	AREVA
Nicolas Waeckel	EDF (France)
Arif Kilic	APS, PVNGS
Kurt Edsinger	EPRI
Richard Deveney	AREVA
Bert Dunn	AREVA
Ralph Landry	NRC
Ralph Caruso	NRC
Debbie Jackson	NRC
John Voglewede	NRC
Mark Blumberg	NRC
Ralph Meyer	NRC
Gregg Swindlehurst	Duke Energy
Michelle Hart	NRC

ENCLOSURE

Nuclear Energy Institute
Electric Power Research Institute

Project No. 689
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