

March 14, 2003

MEMORANDUM TO: Marsha Gamberoni, Deputy Director
New Reactor Licensing Project Office
Office of Nuclear Reactor Regulation

FROM: Joseph Colaccino, Senior Project Manager */RA/*
New Reactor Licensing Project Office
Office of Nuclear Reactor Regulation

SUBJECT: MARCH 4, 2003, TELEPHONE CONFERENCE CALL SUMMARY

On Tuesday, March 4, 2003, a telephone conference call was held with Westinghouse Electric Company (Westinghouse) representatives and Nuclear Regulatory Commission (NRC) staff to discuss several requests for additional information (RAIs). The following RAIs were discussed: 470.002, 470.003, 470.007 and 470.011. Westinghouse submitted responses to these RAIs on October 18 (ADAMS Accession No. ML022980577) and November 26, 2002 (ADAMS Accession No. ML023360097). A list of call participants is included in Attachment 1. Attachment 2 contains NRC staff comments regarding the subject RAIs that were sent to Mr. Michael Corletti of Westinghouse via electronic mail on February 28 and March 4, 2003. These comments were used to facilitate discussions during the telephone conference call.

Following is a brief summary of the discussions regarding the identified RAIs (see comments in Attachment 2):

RAI 470.002

Westinghouse agreed to modify the RAI response to characterize the calculations and provide additional information to enable the NRC staff to perform confirmatory calculations.

RAI 470.003

Westinghouse agreed to modify the RAI response to describe the calculation.

RAI 470.007

Westinghouse agreed to modify the RAI response to further describe their calculation methodology and provide a reference for the activity in the spent fuel pool.

RAI 470.011

Westinghouse agreed to modify the RAI response to show the effect on dose due to increased height.

Docket No. 52-006

Attachment: As stated

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DATE	03/12/03	03/13/03	03/14/03

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MARCH 4, 2003
TELEPHONE CONFERENCE CALLS SUMMARY
LIST OF PARTICIPANTS

Nuclear Regulatory Commission

Joseph Colaccino
Michelle Hart
Andrzej Drozd

Westinghouse

Mike Corletti
Ed Cummins
Jim Grover
Dulal Bhowmick

NUCLEAR REGULATORY COMMISSION STAFF
COMMENTS THAT WERE SENT TO WESTINGHOUSE TO
FACILITATE DISCUSSIONS OF THE RAI RESPONSES
FOR CALL HELD ON MARCH 4, 2003

E-Mailed February 28, 2003:

470.002 What is the basis for the leak flashing fraction of 0.04 percent for the first 60 minutes of the locked rotor accident (LRA)?

The Westinghouse response clarified that the leak flashing fraction is 0.04 (no percent). The response stated that the flashing fraction was calculated using the temperature of the hot leg following the locked rotor together with the secondary system pressure. What is the temperature of the hot leg? Is this noted somewhere in the design control document (DCD)?

470.003 What is the basis for the assumed leak flashing fraction of 4.0 percent in the radiological consequences analysis of the rod ejection accident (REA)?

The Westinghouse response states that the flashing fraction was calculated using the transient vessel average temperature from the small break loss-of-coolant analysis (SBLOCA) analysis. What value was used? Is this noted somewhere in the DCD?

470.007 All Chapter 15 design-basis accident radiological analyses include a discussion of additional radiological consequences of spent fuel pool boiling that may occur coincident with the accident. What assumptions and inputs are used to calculate the radiological consequences as a result of spent fuel pool boiling?

- A. The Westinghouse response states that the initial activity in the spent fuel pool is 3.18 Ci of I-131, and that it is based on a concentration that will result in a radiation field of 2.5 mrem/hr at the pool surface. Why was 2.5 mrem/hr chosen? How did you determine the activity of I-131 that results in 2.5 mrem/hr at the pool surface? Please provide details.
- B. The Westinghouse response states that the amount of I-131 entering the pool over a 30-day period due to diffusion from fuel rods containing cladding defects is 1.94 Ci. How did you determine this value?

E-Mailed March 4, 2003:

470.011 (Appendix 15B, paragraph 15B.2.6) The paragraph presents a qualitative discussion of the differences between the AP600 and the AP1000 designs concluding that the use of the AP600 removal coefficients is conservative. Please, provide either a sample calculation, or an analytical justification for this conclusion. Also, one potentially important difference is omitted, i.e., the increased height of the AP1000

containment. It is known that the increased height decreases the rate of aerosol removal, which would be a non-conservative effect. Please, discuss the significance of this issue.

Additional discussion is needed regarding the effect of height on the rate of aerosol removal.

AP 1000

cc:

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