

May 6, 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 11, 2003, TELEPHONE CONFERENCE CALL SUMMARY

On Tuesday, March 11, 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: 630.025, 630.027, 630.028, 630.036, 630.039, 630.042, 630.045, and 630.052. Westinghouse submitted responses to these RAIs in two separate letters dated December 2, 2002 (ADAMS Accession Nos. ML023400215 and No. ML023230385). A list of call participants is included in Attachment 1. Attachment 2 contains NRC staff comments regarding RAIs 630.036, 630.039, 630.042, 630.045, and 630.052, which were sent to Mr. Michael Corletti of Westinghouse via electronic mail on March 7, 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 630.025

The NRC staff stated that Technical Specification (TS) 3.4.17 Required Action B.1 is missing the pronoun "it." Westinghouse agreed with the proposed language and will revise the RAI response and the TS.

RAI 630.027

The NRC staff stated that the proposed TS 3.4.12 Bases changes did not seem to answer the question. Westinghouse agreed to modify the RAI response and revise the TS Bases.

RAI 630.028

The NRC discussed TS 3.4.11 for the automatic depressurization system (ADS) and described that there were 3 possible conditions with one completion time and asked Westinghouse how this completion time is applied. Specifically, what happens when one or two flow paths are

inoperable with no more than one flow path in a stage. Another issue is that if the completion time section action condition can be described by the entered condition, and no other condition, then you don't have to consider the condition not defined. The staff stated that this language is not clear.

Westinghouse stated that this issue covers all the ADS TS section. Westinghouse stated that they will revise the RAI response and the TS. Westinghouse will also review other TS sections to screen for this issue.

#### RAI 630.036

Westinghouse stated that the size of the AP1000 accumulators did not change from that of the AP600. However, the AP1000 fuel rods contain more poison and there is a lower boron concentration in the reactor coolant system (RCS), than in the AP600. With larger RCS and core makeup tank (CMT) volumes, Westinghouse stated the analysis results were acceptable. Westinghouse also noted that the AP1000 is an 18-month core. The NRC staff stated no additional information was needed.

#### RAI 630.039

Westinghouse stated that probabilistic risk assessment criteria assumed multiple failures. PRA sensitivity studies determined that a small uncertainty in volume will still achieve success. Therefore, the 97 percent IRWST limit is justified.

The NRC stated that Westinghouse needed to state in the TS the required volume in the tank. If this volume was not achieved, then it would be inoperable. Westinghouse agreed to modify the RAI response and will revise the TS for clarification.

#### RAI 630.042

The NRC staff discussed the Bases Content issue with Westinghouse and determined that no changes will be required.

#### RAI 630.045

Westinghouse understood the comment and agreed to modify the RAI response and the TS Bases to correct inconsistencies in language.

#### RAI 630.052

Westinghouse stated that it felt the NRC staff was not being consistent with this question as the AP600 excluded decay times. The NRC staff stated that this TS preserves the validity of the assumptions in the fuel handling accident analysis, and is, therefore, required to be in TSs by 10 CFR 50.36. It has been changed because certain operating plants can move fuel in less than 100 hours after shutdown. In addition, the relocation of decay time has been denied for a

number of operating plants. The NRC further stated that Westinghouse should either revise the analysis or add a limiting condition for operation. Westinghouse stated that they would revise its RAI response and may either add a specification or revise Chapter 15 of the DCD.

Docket No. 52-006

Attachment: As stated

number of operating plants. The NRC further stated that Westinghouse should either revise the analysis or add a limiting condition for operation. Westinghouse stated that they would revise its RAI response and may either add a specification or revise Chapter 15 of the DCD.

Docket No. 52-006

Attachment: As stated

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\*See previous concurrence

ACCESSION NUMBER: ML030910425

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MARCH 11, 2003  
TELEPHONE CONFERENCE CALLS SUMMARY  
LIST OF PARTICIPANTS

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John Segala  
Craig Harbuck

Westinghouse

Mike Corletti  
Dulal Bhowmick

NUCLEAR REGULATORY COMMISSION STAFF  
COMMENTS THAT WERE SENT TO WESTINGHOUSE TO  
FACILITATE DISCUSSIONS OF THE RAI RESPONSES  
FOR CALL HELD ON MARCH 11, 2003

E-mailed March 7, 2003:

**AP1000 Series 630 RAIs: Technical Specifications:**

**630.036**

Further discussion of Westinghouse response is required.

**630.039**

If in-containment refueling water storage tank (IRWST) water volume goes below 97 percent, the 8-hour restoration time to  $\geq$  100 percent does not appear justified.

**630.042**

The limiting design basis accidents with respect to containment parameter limits should be stated in the Bases. The reason for omitting the information is not unique to these three Limiting Conditions for Operations (LCOs).

**630.045**

Need to clarify last sentence of Insert 1 of the response.

**630.052**

The discussion of the decay time is insufficient - a 100-hour assumption would likely not be short enough to use the "physically impossible" argument. In order to not include a technical specification LCO for the decay time, the fuel handling accident analysis must assume a decay time that is clearly less than the time physically needed to begin moving fuel assemblies out of the core following unit shutdown for refueling, and that analysis should predict acceptable dose consequences. Staff does not consider 100 hours to be short enough.

AP 1000

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