

May 25, 2011

MEMORANDUM TO: Robert K. Johnson, Chief  
Fuel Manufacturing Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

FROM: Christopher P. Ryder, Project Manager **/RA/**  
Fuel Manufacturing Branch  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

SUBJECT: APRIL 20, 2011, TELEPHONE CALL SUMMARY: CLARIFYING  
RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION

On April 20, 2011, the U.S. Nuclear Regulatory Commission's staff held a telephone conference call with staff from the Westinghouse Columbia Fuel Fabrication Facility.

A summary of the conversation is enclosed. The summary contains no proprietary or classified information.

Docket No. 70-1151  
License No. SNM-1107

Enclosure:  
Conference Call Summary

CONTACT: Christopher Ryder, NMSS/FCSS  
(301) 492-3189

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NAME	CRyder	LAllen	RJohnson
DATE	5/25/11	5/2/11	5/4/11

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## CONFERENCE CALL SUMMARY

### DATE AND TIME

April 20, 2011, 9:00 AM (eastern DST)

### PARTICIPANTS: U.S. NUCLEAR REGULATORY COMMISSION (NRC)

Christian Fisher, Criticality Safety Reviewer and Inspector  
Christopher Tripp, Senior Criticality Safety Reviewer and Inspector  
Christopher Ryder, Licensing Project Manger

### PARTICIPANTS: WESTINGHOUSE ELECTRIC COMPANY

Gerald Couture, Licensing Manager  
Carl Snyder, Nuclear Criticality Safety Manager  
Sean Gough, Nuclear Criticality Safety, Lead Engineer

### BACKGROUND

On December 15, 2010, the Westinghouse Electric Company, Columbia Fuel Fabrication Facility, (Westinghouse) submitted an amendment request (Agencywide Documents Access and Management System [ADAMS], Accession Number ML110260226) to change a definition in the Integrated Safety Analysis (ISA). The NRC staff sent a Request for Additional Information (RAI) to Westinghouse on March 20, 2011 (ADAMS Accession Number ML110660024). Westinghouse responded in a letter, dated April 8, 2011 (ADAMS Accession Number ML111010554). Some of the responses were unclear to the NRC staff. The NRC and Westinghouse staffs agreed to have a conference call to clarify the responses.

Prior to the call, Christopher Ryder sent questions to Westinghouse to prepare for the call.

Only those RAIs that the NRC staff needed to clarify were discussed.

### DISCUSSION

NRC's Comment on Response to RAI 3. Clarify that stacking the pellet trays is the example of many unlikely upsets, and that moderation is not an unlikely upset.

Westinghouse's Reply: The combination of multiple pellet trays being stacked with the unlikely introduction of moderation is the sequence of many unlikely events that RAI 3 refers to.

NRC's Comment on Response to RAI 4. Clarify that the argument for incredibility is, "this system is incredible because the worst case is subcritical."

Westinghouse's Reply: Given a specific initiating event, if the subsequent scenarios are always subcritical, then—and only then—would "a process deviation for which there is a convincing

Enclosure

argument, given physical laws, that they are not possible” be used. This is from Bullet 3 in Section 1.1.6.22 of the license application. The other portion of Bullet 3 is addressed in RAI 7.

NRC’s Comment on Response to RAI 5. Clarify the Westinghouse response that for something to be doubly contingent, it must meet the -4 index as stated in the ISA Handbook for Overall Likelihood Index (OLI).

Westinghouse’s Reply: Double contingency should be equal to a -4, based on the OLI from the ISA handbook, with each unlikely contingency rating at least at a -2.

NRC’s Comment on Response to RAI 7. The NRC staff needs to understand how the response would be used at the working level. Also, the NRC staff needs a definition from Westinghouse, since in an inspection/enforcement environment it matters more how Westinghouse defines matters than the definition in the Standard Review Plan.

Westinghouse’s Reply: The NRC determined that more time is needed to review Response 7 because the Westinghouse staff had not used the “unquestionably extremely unlikely” argument to date; and could not define the argument.

NRC’s Comment on Response to RAI 9. The Westinghouse staff needs to elaborate on the response to RAI 9 for the NRC to evaluate. For example, will only administrative Safety Significant Controls (SSCs) be placed on incredible scenarios?

Westinghouse’s Reply: Administrative SSCs will be the only SSCs to be placed on incredible scenarios; and only when the incredibility argument was made based on Bullet 2 of Section 1.1.6.22 of the license application. The reason for these administrative SSCs is to highlight key parts of procedures/postings for operators to pay extra attention to.

NRC’s Comment on Response to RAI 10. Clarify the Westinghouse response that a design feature is an attribute of an Item Relied on for Safety (IROFS).

Westinghouse’s Reply: The “design feature” as mentioned in NCS-017, is always an attribute of an IROFS. The wording could be changed in the procedure to “safety boundary” or “aspect of IROFS to meet safety function.” The wording change might alleviate any unintended link to the current “design features” topic, which has been in dialogue with the Nuclear Energy Institute and the NRC recently.

NRC’s Comment on Response to RAI 11. The response is unclear. The NRC staff would also benefit from an explanation about implicitly crediting design features.

Westinghouse’s Reply: Westinghouse discussed another example to illustrate that “some design features of the system may be implicitly credited in incredibility determinations.” The example will be formally discussed in a formal revision to the response to RAI 11 (see below).

## FOLLOW-UP ACTIONS

Afterwards, the NRC staff decided to request that Westinghouse revise and resubmit the answer to RAI 11, which states:

Provide an example of "some design features of the system [that] may be implicitly credited in incredibility determinations," as mentioned in NCS-017.

An e-mail was sent to G. Couture on April 21, 2011, requesting a revised answer to RAI 11 by May 9, 2011. The e-mail is on the docket (ADAMS Accession Number ML111150111).