



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

September 24, 1990

MEETING SUMMARY

SUBJECT: BWROG GENERIC ISSUE C.8, MSIV LEAKAGE AND IODINE RESUSPENSION
DATE AND TIME: August 31, 1990
9:15
LOCATION: One White Flint North
8-E-1

I. Background

The BWROG and NRC radiological models intended to account for mechanisms affecting MSIV leakage in the main steam lines are different. They differ by an approximate factor of two (2).

Because the BWROG believes that the Reg. Guide 1.3 source term is ultra conservative (probably true), it has been reluctant to consider mechanisms in the main steam line that would add to the 4% methyl iodide content of the steam leaking through the MSIVs. Resuspension adds to the methyl iodide content as the remaining 96% (of the 25% total core iodine inventory) travels down the main steam lines. Calculations performed by the NRC contractor (Dr. Jim Cline of SAIC), yield a peak of approximately 8 to 10% methyl iodide resulting from resuspension. This difference (4% methyl iodide for the BWROG model, vice 8 to 10% for the NRC model) is accounted for by the resuspension term. The BWROG computer code does not currently calculate resuspension.

The absence of a resuspension calculation in the BWROG code is the subject of this meeting. (See also summary of internal NRC meeting on this subject held 21 August 1990.)

II. Highlights

Kudrick presented a brief history of how we have arrived at this point. In addition, it was noted that the staff had, in a previous meeting with the BWROG in San Jose, acquiesced with the BWROG's stated intent not to consider resuspension in their calculations. Although the possibility of a significant difference between BWROG and NRC calculations for the same process was recognized at that time, close agreement between BWROG and NRC methodologies was not considered vital for the timely approval of an associated Topical Report.

After considering the alternatives and receiving opinions from attendees, it was agreed that the staff would advise the BWROG that timely approval of their Topical Report would be enhanced by close agreement between their methodology and the NRC's methodology. In essence, that meant including a term (or terms) to account for both deposition and resuspension in the BWROG code.

It was further agreed that the staff would share the information necessary for the BWROG to properly account for resuspension in their methodology. This may include the subroutine or other technical information necessary for calculation.

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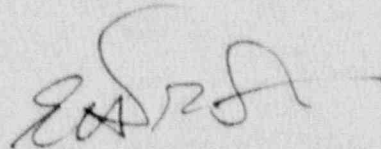
While the BWROG methodology and code may differ significantly from the NRC's, inclusion of the resuspension term should result in closer agreement with the NRC result. This will be an independent "quality check" providing some confidence that basic assumptions are valid. In addition, this will ensure primary reliance on the NRC's methodology as the technical basis for considering whatever exemption requests may result from this effort.

Finally, the effect on the current BWROG schedule resulting from this change to their methodology and code was discussed. It was decided that the short term time penalty would in all probability be far outweighed by the enhanced confidence provided by two different, but similar calculations yielding similar results. It is believed that such technical consistency will enhance the required review effort by other groups within the NRC.

The meeting adjourned at approximately 09:55.

III. Action Items

- a. Advise the BWROG that adding resuspension term to their code to be consistent with NRC approach will enhance timely review of their Topical Report. (Trottier, Kudrick, Lee, Essig; completed 31 August)
- b. Place SAIC Report, "MSIV Leakage Iodine Transport Analysis" into the Public Document Room. (Trottier; completed 5 Sept.)
- c. Provide BWROG with resuspension portion (subroutine) of NRC code and calculations necessary to ensure compatibility. (Trottier, Cline; completed 6 Sept.)



E. H. Trottier, Project Manager
Project Directorate I-3
Division of Reactor Projects - I/II

Enclosure:
Attendance List

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/s/

Edouard H. Trottier, Project Manager
Project Directorate I-3
Division of Reactor Projects - I/II

Enclosure:
Attendance List

PM:RD
ETrottier
09/24/90

D:PDI-2
WButler
09/ /90

ENCLOSURE

ATTENDANCE

August 31, 1990

<u>Name</u>	<u>Organization</u>
A. Thadani	NRR
G. Holahan	NRR
C. McCracken	NRR
T. Essig	NRR
J. Lee	NRR
J. Kudrick	NRR
E. Trottier	NRR

September 24, 1990

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