



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

December 10, 1996

MEMORANDUM TO: THE FILES

FROM: Jack Guttman, Sr. Reliability & Risk Assessment Engineer  
Probabilistic Risk Analysis Branch  
Division of Systems Technology, RES *Jack Guttman*

Syed Ali, Structural Engineer  
Civil Engineering and Geosciences Branch *Syed A. Ali*  
Division of Engineering, NRR

SUBJECT: MEETING SUMMARY - MEETING WITH THE ASME RESEARCH ON NUCLEAR  
RISK-BASED INSERVICE INSPECTION PROGRAMS

Date: November 7-8, 1996

Location: 1828 L-Street, NW, Suite 906  
Washington, DC 20036

On Thursday, November 7 and Friday, November 8, 1996, the ASME-Research discussed its ongoing activities to develop risk-informed inservice inspection programs.

The purpose for this meeting was to discuss results from benchmark calculations between the industry's and NRC's structural reliability computer code results. Good comparisons were observed for the small and large leak calculations. Some significant differences were observed for the break probability calculations (see attached comparisons). Discussions focused on the input parameters used in the break calculations. Excellent comparisons were observed for the cases where leak detection was not credited. Drs. Simonen and Bishop were requested to continue their investigations into the reasons for the differences between the industry's and NRC's calculations.

The meeting led to agreement on acceptable assumptions for welding defects (flaw density and flaw size) to be used in the analysis of failure probabilities. The NRC stated that it was in the process of quantifying the uncertainties in the calculated failure probabilities.

Discussions also focused on the proposed integration of risk calculations. During the recent months, the scope of the PRA was significantly expanded. The new scope includes calculating the consequences from a leak, a disabling leak, and a full break. The potential consequences from a leak is jet impingement and spray that can disable a component or system. A disabling leak is a break size that can result in:

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December 10, 1996

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The ASME and the NRC agreed to a conference call to discuss the status of the above activities. The conference call was scheduled for November 25, 1996 at 1:30 p.m. EST.

This meeting was publicly noticed (see Attachment).

Attachments:

1. Attendees List
2. Presentation Material
3. Public Notice

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| NAME   | JGuttmann/mb |                                     | ARamey-Smith |                                     | SAl i        |                                     | GBagchi     |                                     | MCunningham  |                                     |
| DATE   | 11 / 15 / 96 |                                     | 11 / 21 / 96 |                                     | 11 / 15 / 96 |                                     | 12 / 4 / 96 |                                     | 12 / 10 / 96 |                                     |

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| NAME   | JGuttmann/mb |                                       | ARamey-Smith        |                                       | SAli <i>LAH</i> |                                       | GBagchi |                          | MCunningham |                          |
| DATE   | 11 / 15 / 96 |                                       | 11 / 21 / 96        |                                       | 11 / 15 / 96    |                                       | 1 / 96  |                          | 1 / 96      |                          |

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