

October 31, 2007

MEMORANDUM TO: Matthew A. Mitchell, Chief
Vessels and Internals Integrity Branch
Division of Component Integrity
Office of Nuclear Reactor Regulation

FROM: John Honcharik, Materials Engineer /RA/
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Division of Component Integrity
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF SEPTEMBER 27, 2007 PUBLIC MEETING TO
DISCUSS BWRVIP STEAM DRYER INTEGRITY GUIDANCE

On September 27, 2007, a Category 2 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of the nuclear industry at NRC Headquarters, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland. The purpose of the meeting was for the Boiling Water Reactor Vessels and Internals Project (BWRVIP) to discuss the proposed steam dryer guidance document and the proposed responses to the staff's requests for additional information on the BWRVIP-139 report, "Steam Dryer Inspection and Flaw Evaluation Guidelines" and Section 4.0, "Consideration of Loose Parts" of the BWRVIP-06-A report, "Safety Assessment of BWR Reactor Internals" with the NRC staff. A list of attendees is enclosed.

NRC participants included staff from the Office of Nuclear Reactor Regulation (NRR), and the Office of New Reactors (NRO). The NRC met with the BWRVIP and industry to discuss the proposed report titled "Guidance for Demonstration of Steam Dryer Integrity for Power Uprate." This report will be used by BWR licensees as a standardized approach in demonstrating the integrity of the steam dryer for extended power uprate applications. The NRC staff provided comments during the meeting to relay the staff's expectations on setting the framework of demonstrating steam dryer integrity. The BWRVIP plans to submit the report in December 2007 to the NRC for review and approval. Some of the NRC comments concerned screening criteria, benchmarking, and generic power accession plans and are listed below:

- Currently, the BWRVIP report is not intended to be used specifically for new reactors. However, this report and/or related work may be applied to new reactors in order to gain efficiencies in review cycles, etc. The BWRVIP will consider if this report can be used as guidance for new reactors.
- A schedule (including submittal and required by dates) should be developed and adhered to in order to ensure a successful path that allows reviews to be performed in a thorough and efficient manner.
- Acceptance criteria (ASME Code stress allowables) need to be clarified and defined.

- Provide and summarize the validation (quality assurance) process applied to the computer codes used for the acoustic circuit model.
- Benchmarking of the methods used for demonstrating steam dryer integrity should be included.
- A strong screening method that can accurately assess the potential for acoustic excitation should be performed first, followed by any applicable testing. A screening flow chart would also be beneficial.
- Additional justification to validate the Strouhal number range for acoustic excitation and to clarify what actions should be taken within this range is needed.
- Parameters (e.g., test length, etc.) related to potential main steam isolation valve testing should be included.
- Generic power ascension monitoring plan using approaches similar to Vermont Yankee and Susquehanna is needed.
- Guidance on how to determine uncertainties and bias values from small scale modeling tests, etc. is needed.
- A comparison of the frequency analysis and the time/history analysis methodologies is needed.
- A discussion of the implication of the broadband excitation frequency phenomena observed at Quad Cities should be included.

The BWRVIP also plans on submitting other reports (the Steam Dryer Repair Design Criteria report and the Steam Dryer Integrity Demonstration Methodologies report) to the staff that, when used in conjunction with the "Guidance for Demonstration of Steam Dryer Integrity for Power Uprate" document discussed in this meeting, will form the basis for steam dryer integrity demonstrations. Similar pre-application meetings for the methodology and design criteria reports are needed prior to submittal of these reports. This will enhance the review process of these reports by providing opportunities for feedback and comments.

The BWRVIP and the NRC staff also discussed the proposed responses to the RAIs provided to the BWRVIP in the staff's letters dated April 13, 2006, and December 21, 2006, concerning the BWRVIP-139 report and Section 4.0 of the BWRVIP-06-A report, respectively. Additional meetings may be necessary to ensure responses to the RAIs adequately address the staff's concerns in order for the staff to complete their reviews of BWRVIP-139 and BWRVIP-06-A reports.

CONTACT: John Honcharik
(301) 415-1157

Enclosure:
List of Attendees

cc w/encl: BWRVIP Service List

The BWRVIP and the NRC staff also discussed the proposed responses to the RAIs provided to the BWRVIP in the staff's letters dated April 13, 2006, and December 21, 2006, concerning the BWRVIP-139 report and Section 4.0 of the BWRVIP-06-A report, respectively. Additional meetings may be necessary to ensure responses to the RAIs adequately address the staff's concerns in order for the staff to complete their reviews of BWRVIP-139 and BWRVIP-06-A reports.

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Enclosure:
List of Attendees

cc w/encl: BWRVIP Service List

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OFFICE	DCI/CVIB	DCI/CVIB
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DATE	10/19/2007	10/31/2007

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MEETING TO DISCUSS BWRVIP STEAM DRYER INTEGRITY GUIDANCE

September 27, 2007

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