

March 30, 2005

MEMORANDUM TO: Robert Gramm, Chief, Section 2
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

FROM: Bo Pham, Project Manager, Section 2 **/RA/**
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF MEETING HELD ON MARCH 16, 2005, WITH THE
BOILING WATER REACTORS OWNERS GROUP (BWROG) TO
DISCUSS PROPOSED TOPICAL REPORTS (TRs) ON PRESSURE-
TEMPERATURE CURVES/LIMITS (TAC NO. MC5651)

On March 16, 2005, the BWROG met with the U.S. Nuclear Regulatory Commission (NRC) staff to discuss its plans to develop and submit TRs by GE Energy and Structural Integrity Associates, Inc., which request NRC approval of methodologies to develop pressure-temperature limit reports (PTLRs) for boiling water reactors (BWRs).

The NRC began the meeting with remarks about the TR review process and the role of the pre-submittal meeting, including expectations of outcomes from both parties. The NRC staff emphasized that the pre-submittal meeting does not substitute for an acceptance review, but does give the staff the opportunity to provide feedback to the BWROG, and is intended to assist in aligning expectations for TRs and their reviews.

The BWROG followed with its presentation of the proposed TRs. The presentation slides are attached and also available on the Agency Document Access and Management System (Accession No. ML050760401).

After the BWROG's presentation, the staff responded with feedback, noting the following points:

- Since the BWROG does not intend to reference a particular fluence methodology in its TRs, it should clearly state that the TRs can only be applied in conjunction with an NRC-approved fluence methodology.
- The TRs should address how the Boiling Water Reactor Vessel and Internals Project (BWRVIP) Integrated Surveillance Program (ISP) data will be utilized and implemented into the TRs, referencing Generic Letter 96-03 for guidance. Given the unique nature of the BWRVIP ISP, the staff expects that how this is addressed in the PTLR methodology TRs, and in the PTLRs themselves, will be a significant topic during the staff's review.

- These TRs are expected to address the topic of establishing region-specific P-T limit curves (bottom head curves, nozzle beltline curves, etc.) for BWR reactor pressure vessels. To achieve this, two options were discussed: (1) the establishment of a generic, bounding assessment, the applicability of which must be confirmed on a plant-specific basis, or (2) the establishment of a methodology for developing plant-specific region-specific curves. In either case, the approach must be capable of addressing (or bounding) plant-specific differences in nozzle geometry, design transients, material properties, etc. If a bounding approach is used, a checklist of plant-specific items, which must be demonstrated to ensure that the bounding analysis covers a specific plant, should be included with the methodology.
- If plant specific data is used, the TR should include K_t and $\hat{I} T$ values.
- The PTLR developed from the TR should provide sufficient data to ensure that ISP data, nozzle analyses, Regulatory Guide 1.99, Revision 2 embrittlement methodology, and an approved neutron fluence methodology are included.
- The NRC staff expects that the BWROG TR's reviews would be much lengthier than the pressurized water reactor review.
- The BWROG discussed the possibility of providing one or more plant-specific license amendment applications in parallel with the submittal of the TRs as "examples" of the implementation of the PTLR methodologies. The staff recommended that, in this case, it would be preferable for the staff to complete its review of the TRs before a licensee submitted a licensing basis change based upon their use. The staff recommended that the BWROG may wish to consider developing and providing specific "example" PTLRs as appendices to the TR submittals to facilitate staff review of the proposed PTLR methodologies.
- The NRC staff does not anticipate any near-term scheduled or planned NRC rulemaking on Pressure-Temperature limits.

The BWROG anticipates a late May 2005 submittal of its TRs. A list of meeting attendees is also attached.

Project No. 691

Attachments: As stated

cc w/atts: See next page

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ATTENDEES

MEETING WITH THE BOILING WATER REACTORS OWNERS GROUP (BWROG)

MARCH 16, 2005

BWROG

W. Fiock
B. Branlund
L. Tilly
G. Stevens
T. Browning

NRC

B. Pham
A. Black
L. Lois
R. Gramm
B. Elliot
M. Mitchell
J. Medoff