



Progress Energy

APR 18 2011

SERIAL: BSEP 11-0039

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Renewed Facility Operating License Nos. DPR-71 and DPR-62
Docket Nos. 50-325 and 50-324
Notification of Deviation from BWRVIP-25 Guidance

- References:
1. BWRVIP-94, Revision 1: BWR Vessel and Internals Project, Program Implementation Guide, EPRI, Palo Alto, CA: 2005: 1011702.
 2. BWR Vessel and Internals Project, BWR Core Plate Inspection and Flaw Evaluation Guidelines (BWRVIP-25), EPRI Report TR-107284, December 1996.

Ladies and Gentlemen:

This letter is to notify the NRC of a deviation from the Boiling Water Reactor Vessels and Internals Project (BWRVIP) guidelines for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2. Reference 1 requires a report be sent to the NRC any time a utility does not implement any portion of an applicable "mandatory" or "needed" BWRVIP guideline that has been approved by the Executive Committee and transmitted to the NRC. This notification must be sent to the NRC within 45 days of the utility executive concurrence with the deviation disposition.

The deviation is from a "needed" element of the BWRVIP program. The needed element is the inspection of core plate bolting in accordance with the guidance of BWRVIP-25 (i.e., Reference 2). BWRVIP-25 requires that 50 percent of the core plate rim hold-down bolts of BWR/2-5 plants without repair wedges be examined by enhanced VT-1 from below the core plate, or by ultrasonic (UT) examination from above core plate once the technique is developed. However, the bolts cannot be inspected by UT, as described in BWRVIP-25, due to configuration issues and it has recently been concluded that an EVT-1 exam does not provide meaningful results. Accordingly, a technical justification for deviation from the BWRVIP guidance was developed.

The technical justification demonstrates that the core plate bolts have a relatively low susceptibility to cracking based on field experience and fabrication practices. In addition,

should cracking occur in some bolts, the consequences are mitigated by redundancy in the bolting and associated alignment hardware. Finally, even with the extremely conservative assumptions of failures of both the bolting and the redundant hardware, the Standby Liquid Control (SLC) System could be used to bring the reactor to a safe shutdown.

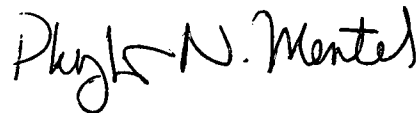
The BWRVIP is currently working on developing revised guidance for the core plate bolts and expects to complete that work, including gaining NRC approval of the revised guidance, by 2015. Until such time as new guidance is provided, CP&L will perform UT examination of the bolting from the outside diameter of the core shroud through the core plate support ring to ensure that significant degradation is not occurring. Given the low likelihood that the function of the core plate will be compromised by bolting failures, the UT examinations constitute an acceptable interim inspection strategy until such time as the BWRVIP develops revised guidance.

The deviation from the BWRVIP guidelines has been documented, reviewed, and was approved on March 25, 2011.

This letter is being submitted for information only, and CP&L is not requesting any action from the NRC.

No regulatory commitments are contained in this letter. Please refer any questions regarding this submittal to Mr. Lee Grzeck, Acting Supervisor - Licensing/Regulatory Programs, at (910) 457-2487.

Sincerely,

A handwritten signature in black ink that reads "Phyllis N. Mentel". The signature is written in a cursive style with a large initial "P".

Phyllis N. Mentel
Manager - Support Services
Brunswick Steam Electric Plant

Document Control Desk
BSEP 11-0039 / Page 3

WRM/wrm

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