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August 2, 2006

Docket Nos.: 50-321
50-366

NL-06-1634

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

Edwin I. Hatch Nuclear Plant
Notification of Deviation from BWRVIP-76

Ladies and Gentlemen:

Per prior agreement with the BWRVIP (References 1and 2), participating licensees will notify the staff of a decision by the licensee to not fully implement the approved guidance. By this letter, SNC is providing notification to the NRC that Plant Hatch Units 1 and 2 will not fully implement the subject guidance with respect to vertical welds on the Core Shroud.

BWRVIP Core Shroud Inspection and Flaw Evaluation Guidelines (BWRVIP-76) provide criteria for the examination of Core Shroud vertical welds. The criteria specify that for Hatch Units 1 and 2, the preferred examination for vertical welds is either ultrasonic testing (UT) or enhanced visual examination (EVT) from both the inner and outer diameter. Utilities are allowed to utilize one-sided EVT when access does not allow the preferred examinations. However, there is a shorter interval of re-examination when one-sided EVT is utilized. Since the 1999 issuance of BWRVIP-76, Hatch has considered certain vertical welds inaccessible based on examination capabilities. One of these previously inaccessible welds (V-10 on each Unit) has recently become accessible by means of one of the preferred examination methods (UT). A technical justification, in accordance with BWRVIP-94, documents the basis for exception to BWRVIP-76 UT inspection requirements for shroud vertical weld V-10 on both Units.

The technical justification was prepared, reviewed and approved per SNC internal procedures. The technical justification concludes that minimal safety benefit would be derived from examining V-10 with UT based on the following factor:

- One sided EVT examinations are allowed by the BWRVIP as adequate with a reduced interval of re-inspection;
- Large flaw tolerance for shroud vertical welds (≈15% ligament needed for V10);
- Large percentage of shroud vertical welds (56% for Hatch) and all welds in higher fluence regions are examined in the preferred manner;

- Outside the high fluence regions, vertical weld cracking has been minimal in the industry and at Hatch;
- The lower core shroud region benefits from the reduced crack initiation and growth due to Hydrogen Water Chemistry/Noble Metal Chemical Addition mitigation.

Additionally, the UT delivery tooling considered for this examination is not proven in this application, thus adding more uncertainty to the prospect of deployment. This deviation is only approved by SNC for the interim until improved tooling is developed. SNC will continue to monitor the inspection vendors' capabilities for shroud examinations.

This letter contains no NRC commitments. If you have any questions, please advise.

Sincerely,

L. M. Stinson

LMS/PAH/daj

References: 1. Letter 97-461 Dated May 30, 1997, from Carl Terry, Chairman, BWR Vessel and Internals Project to NRC Document Control Desk (Attention: Brian Sheron), Reaffirming the BWR Utility Commitments to the Goals, Objectives, and Products of the BWR Vessel and Internals Project (BWRVIP)

2. Letter 97-870 Dated October 30, 1997, from Carl Terry, Chairman, BWR Vessel and Internals Project to NRC Document Control Desk (Attention: Brian Sheron), to Clarify the BWRVIP Utilities Understanding of the Expectations of the NRC Staff Regarding Implementation of BWRVIP Products

cc: Southern Nuclear Operating Company
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Mr. C. Gratton, NRR Project Manager – Hatch
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