Progress Energy

APR 1 2 2006

SERIAL: BSEP 06-0037

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

Subject: Brunswick Steam Electric Plant, Unit No. 1
Docket No. 50-325/License No. DPR-71
Notification of Deviation From Boiling Water Reactor Vessel and Internals Project Guidelines

Ladies and Gentlemen:

In accordance with BWR Vessel and Internals Project (BWRVIP) Report BWRVIP-94, Revision 1, *BWR Vessel and Internals Project, Program Implementation Guide*, Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc., is notifying the NRC of deviations from BWRVIP guidelines taken by the Brunswick Steam Electric Plant, Unit No. 1. These deviations are associated with the repair of an indication on Core Spray System header piping weld P3c-270. The enclosure of this letter describes each deviation taken from BWRVIP guidelines and what is being done in lieu of the BWRVIP requirement. This information is being submitted to the NRC in accordance with Section 3.5, Reporting, of BWRVIP-94, Revision 1, and no NRC action is being requested in response to the submittal of this information.

No regulatory commitments are contained in this letter. Please refer any questions regarding this submittal to Mr. Leonard R. Beller, Supervisor - Licensing/Regulatory Programs, at (910) 457-2842.

Sincerely,

Randy C Ivey

Randy C. Ivey
Manager - Support Services
Brunswick Steam Electric Plant

WRM/wrm

Enclosure: Descriptions of Deviations From Boiling Water Reactor Vessel and Internals Project (BWRVIP) Guideline

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A001

cc (with enclosure):

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Descriptions of Deviations From Boiling Water Reactor Vessel and Internals Project (BWRVIP) Guideline

In accordance with BWR Vessel and Internals Project (BWRVIP) Report BWRVIP-94, Revision 1, *BWR Vessel and Internals Project, Program Implementation Guide*, Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., is notifying the NRC of deviations from BWRVIP guidelines taken by the Brunswick Steam Electric Plant (BSEP), Unit No. 1. These deviations are associated with the repair of an indication on Core Spray System header piping weld P3c-270.

BWRVIP-94, Revision 1, provides implementation guidance to ensure the consistent application of BWRVIP guidelines by BWRVIP member utilities. Section 3.5 of BWRVIP-94, Revision 1, provides specific guidance for the reporting of inspection results, new repairs, and deviations taken from BWRVIP guidelines. If a utility does not implement any portion of an applicable "mandatory" or "needed" BWRVIP guideline that has been approved by the BWRVIP Executive Committee and transmitted to the NRC, the utility is required to notify the NRC and BWRVIP within 45 days following the utility executive concurrence with the disposition of the deviation. The utility is required to describe what BWRVIP requirement they are deviating from and what is being done in lieu of the applicable requirement.

During the BSEP Unit 1 refueling outage, which began on March 4, 2006, CP&L performed inspections of Core Spray System piping and spargers in accordance with BWRVIP-18-A, *BWR Vessel and Internals Project, BWR Core Spray Internals Inspection and Flaw Evaluation Guidelines*. These inspections identified an indication on the B loop Core Spray System piping inside the reactor pressure vessel which required repair. BWRVIP-19-A, *BWR Vessel and Internals Project, Internal Core Spray Piping and Sparger Repair Design Criteria*, was used for the design, fabrication, and installation of the piping clamp used as a repair. For this repair, the following deviations were taken from the applicable BWRVIP guidelines, as described below.

BWRVIP Document	BWRVIP Requirement	Exception	Alternative In Lieu Of
BWRVIP-84, Section A.9.3.1	Bending Process – Components formed by bending shall be fully solution annealed after the bending process.	Solution annealing after peening of locking pins (i.e., a fabrication operation) and crimping of the crimp cups (i.e., an underwater installation operation) will not be performed.	The locking pins and crimp cups have been machined from SA-479, Type 316L stainless steel barstock with low carbon content. The function of the crimp cup is to prevent loosening of the bolt. Some plastic deformation was required during the installation process. Each crimp cup has been pinned to the pipe assembly and the shear pins have been retained in place by locking pins. Repair clamp inspections will be performed using VT-1/VT-3 techniques and controlled through plant procedures. Initially, the repair clamp will be inspected each refueling outage. The frequency for future repair clamp re-inspections may be extended based on inspection performance.
BWRVIP-84, Section A.11	Packaging, shipping, and storage shall be in accordance with ASME NQA-2-1989, Part 2.2, Level B for welding filler materials, and Level C for all other materials.	ANSI 45.2.2 for packaging, storage, and handling will be used in lieu of ASME NQA-2.	ANSI 45.2.2 has been supplemented with additional requirements in order to meet criteria, equivalent to ASME NQA-2-1989, Part 2.2, Level C.