

March 3, 2005

Mr. J. W. Moyer, Vice President
Carolina Power & Light Company
H. B. Robinson Steam Electric Plant,
Unit No. 2
3581 West Entrance Road
Hartsville, South Carolina 29550

SUBJECT: H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 - RESPONSE TO NUCLEAR REGULATORY COMMISSION BULLETIN 2003-02, "LEAKAGE FROM REACTOR PRESSURE VESSEL LOWER HEAD PENETRATIONS AND REACTOR COOLANT PRESSURE BOUNDARY INTEGRITY" (TAC NO. MC0560)

Dear Mr. Moyer:

On August 21, 2003, the U.S. Nuclear Regulatory Commission (NRC) issued NRC Bulletin 2003-02, "Leakage from Reactor Pressure Vessel Lower Head Penetrations and Reactor Coolant Pressure Boundary Integrity," to the industry. This Bulletin informed addressees that current methods of inspecting the reactor pressure vessel (RPV) lower heads may need to be supplemented with bare-metal visual inspections in order to detect reactor coolant pressure boundary leakage and requested these addressees provide the NRC with information related to inspections that have been performed to verify the integrity of the RPV lower head penetrations.

The Bulletin requested that addressees provide a description of the RPV lower head penetration inspection program that would be implemented at their respective plants during the next and subsequent refueling outages. This description was to include the extent of the inspection, the inspection methods to be used, the qualification standards for the inspection methods, the process used to resolve the source of findings of boric acid deposits or corrosion, the inspection documentation to be generated, and the basis for concluding that their plant satisfied applicable regulatory requirements related to the structural and leakage integrity of the RPV lower head penetrations.

By letter dated November 13, 2003, Carolina Power & Light Company (CP&L) provided its response to this request. CP&L indicated it planned to perform a bare-metal visual examination of the RPV lower head penetrations during the spring 2004 refueling outage at H. B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP2). In its same response, CP&L indicated that the periodicity and scope of future inspections, beyond this initial bare-metal visual examination, will be based on the results of this inspection and relevant regulatory and industry guidance. The NRC staff notes that there are a number of ongoing industry and NRC staff activities related to developing criteria for the RPV lower head penetration inspections. The NRC staff expects that the criteria for these inspections will involve periodic bare-metal visual examinations or their equivalent.

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The Bulletin also requested that addressees provide a summary of the RPV lower head penetration inspection that was performed at their plants, the extent of the inspection and the methods used, a description of the as-found condition of the lower head, any findings of relevant indications of through-wall leakage, and a summary of the disposition of any findings of boric acid deposits and any corrective actions taken as a result of indications found.

By letter dated July 22, 2004, CP&L provided a summary of its inspection results from the spring 2004 refueling outage at HBRSEP2. CP&L performed a bare-metal visual inspection of the RPV lower head, including each of the 50 RPV lower head penetrations, using Special Procedure (SP) -1500, "Visual Examination of RPV Head and Vessel Bottom Penetration Nozzles," Revision 1. CP&L did not observe any evidence of RPV lower head penetration leakage or significant RPV lower head wastage.

Based on its review of CP&L's responses, the NRC staff finds that CP&L has met the reporting requirements of the Bulletin for HBRSEP2. Accordingly, TAC No. MC0560 is closed for HBRSEP2.

Sincerely,

/RA/

Chandu P. Patel, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-261

cc: See next page

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Based on its review of CP&L's responses, the NRC staff finds that CP&L has met the reporting requirements of the Bulletin for HBRSEP2. Accordingly, TAC No. MC0560 is closed for HBRSEP2.

Sincerely,

/RA/

Chandu P. Patel, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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