

Serial: RNP-RA/07-0032

MAR 2 2 2007

United States Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555-0001

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 DOCKET NO. 50-261/LICENSE NO. DPR-23

ADDITIONAL INFORMATION PERTAINING TO PROPOSED TECHNICAL SPECIFICATIONS CHANGES <u>REGARDING STEAM GENERATOR TUBE REPAIR CRITERIA</u>

Ladies and Gentlemen:

In a letter dated January 19, 2007, Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc. (PEC), requested NRC review and approval of changes to modify the Technical Specifications (TS) requirements related to steam generator tube alternate repair criteria for H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2. An NRC request for additional information (RAI) pertaining to this amendment request was received by electronic mail transmission dated February 8, 2007. A response to that RAI was provided by letter dated March 13, 2007.

In telephone communications with the NRC staff reviewers for this proposed TS change, an apparent typographical error was noted in Table 7-11a, Attachment II, of the March 13, 2007 letter. Specifically, the term "Hot Leg" should be changed to "Cold Leg" in that table, consistent with Table 7-12a.

Additionally, it was identified that the alternate repair criteria as proposed should be further clarified to state that it <u>shall</u> be applied as an alternative until the end of Operating Cycle 25, in lieu of stating that it <u>may</u> be applied. The proposed revision to TS page 5.0-13 is provided with this letter, which shows this clarification.

This clarification of the proposed TS requirement does not significantly alter the proposed requirements or associated technical justifications.

Attachment I provides an Affirmation in accordance with the provisions of 10 CFR 50.30(b).

Attachment II provides the revised edited TS page. Attachment III provides the revised TS page.

Progress Energy Carolinas, Inc. Robinson Nuclear Plant 3581 West Entrance Road Hartsville, SC 29550

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In accordance with 10 CFR 50.91, a copy of this application is being provided to the State of South Carolina.

If you have any questions concerning this matter, please contact Mr. C. T. Baucom at (843) 857-1253.

Sincerely,

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Jan F. Lucas Manager – Support Services – Nuclear

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JFL/cac

- Attachments: I. Affirmation
 - II. Revised Edited Technical Specifications Page
 - III. Revised Technical Specifications Page
- c: Mr. T. P. O'Kelley, Director, Bureau of Radiological Health (SC) Mr. H. J. Porter, Director, Division of Radioactive Waste Management (SC) Dr. W. D. Travers, NRC, Region II Ms. L. M. Regner, NRC, NRR Mr. C. P. Patel, NRC, NRR NRC Resident Inspector, HBRSEP Attorney General (SC)

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AFFIRMATION

The information contained in letter RNP-RA/07-0032 is true and correct to the best of my information, knowledge and belief; and the sources of my information are officers, employees, contractors, and agents of Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc. I declare under penalty of perjury that the foregoing is true and correct.

Executed On: 3 22 07

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T. D. Walt Vice President, HBRSEP, Unit No. 2

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

REVISED EDITED TECHNICAL SPECIFICATIONS PAGE

The following alternate tube repair criteria shall be applied as an alternative to the preceding criteria, until the end of Operating Cycle 25:

Flaws found in the portion of the tube below 17 inches from the top of the tubesheet do not require plugging. Tubes with flaws identified in the portion of the tube from the top of the tubesheet to 17 inches below the top of the tubesheet shall be plugged upon detection.

Programs and Manuals 5.5

5.5 Programs and Manuals

(until the end

17 inches below

the top of the

tubesheet on

the tube hot

inches below the top of the

tubesheet on

leg side)

the tube cold

leg side to 17

of Operating Cycle 25 the

required

inspection length extends

5.5.9 <u>Steam Generator (SG) Program</u> (continued)

- Accident induced leakage performance criterion: The primary to secondary accident induced leakage rate for any design basis accident, other than a SG tube rupture, shall not exceed the leakage rate assumed in the accident analysis in terms of total leakage rate for all SGs and leakage rate for an individual SG. Leakage is not to exceed 75 gallons per day per SG.
- 3. The operational LEAKAGE performance criterion is specified in LCO 3.4.13, "RCS Operational LEAKAGE."
- c. Provisions for SG tube repair criteria. Tubes found by inservice inspection to contain flaws with a depth equal to or exceeding the following criteria shall be plugged: 47% of the nominal tube wall thickness if the next inspection interval of that tube is 12 months, and a 2% reduction in the repair criteria for each 12 month period until the next inspection of the tube.
- d. Provisions for SG tube inspections. Periodic SG tube inspections shall be performed. The number and portions of the tubes inspected and methods of inspection shall be performed with the objective of detecting flaws of any type (e.g., volumetric flaws, axial and circumferential cracks) that may be present along the length of the tube. from the tube-to-tubesheet weld at the tube inlet to the tube-to-tubesheet weld at the tube outlet, and that may satisfy the applicable tube repair criteria. The tube-to-tubesheet weld is not part of the tube. In addition to meeting the requirements of d.1, d.2, and d.3 below, the inspection scope, inspection methods, and inspection intervals shall be such as to ensure that SG tube integrity is maintained until the next SG inspection. An assessment of degradation shall be performed to determine the type and location of flaws to which the tubes may be susceptible and, based on this assessment, to determine which inspection methods need to be employed and at what locations.
 - 1. Inspect 100% of the tubes in each SG during the first refueling outage following SG replacement.
 - Inspect 100% of the tubes at sequential periods of 120.
 90. and. thereafter. 60 effective full power months. The first sequential period shall be considered to begin after the first inservice inspection of the SGs. In

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HBRSEP Unit No. 2

United States Nuclear Regulatory Commission Attachment III to Serial: RNP-RA/07-0032 2 pages (including this page)

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REVISED TECHNICAL SPECIFICATIONS PAGE

5.5 Programs and Manuals

5.5.9 <u>Steam Generator (SG) Program</u> (continued)

- Accident induced leakage performance criterion: The primary to secondary accident induced leakage rate for any design basis accident, other than a SG tube rupture, shall not exceed the leakage rate assumed in the accident analysis in terms of total leakage rate for all SGs and leakage rate for an individual SG. Leakage is not to exceed 75 gallons per day per SG.
- 3. The operational LEAKAGE performance criterion is specified in LCO 3.4.13, "RCS Operational LEAKAGE."
- c. Provisions for SG tube repair criteria. Tubes found by inservice inspection to contain flaws with a depth equal to or exceeding the following criteria shall be plugged: 47% of the nominal tube wall thickness if the next inspection interval of that tube is 12 months. and a 2% reduction in the repair criteria for each 12 month period until the next inspection of the tube.

The following alternate tube repair criteria shall be applied as an alternative to the preceding criteria. until the end of Operating Cycle 25:

Flaws found in the portion of the tube below 17 inches from the top of the tubesheet do not require plugging. Tubes with flaws identified in the portion of the tube from the top of the tubesheet to 17 inches below the top of the tubesheet shall be plugged upon detection.

d. Provisions for SG tube inspections. Periodic SG tube inspections shall be performed. The number and portions of the tubes inspected and methods of inspection shall be performed with the objective of detecting flaws of any type (e.g., volumetric flaws, axial and circumferential cracks) that may be present along the length of the tube, from the tube to-tubesheet weld at the tube inlet to the tube-to-tubesheet weld at the tube outlet (until the end of Operating Cycle 25 the required inspection length extends 17 inches below the top of the tubesheet on the tube hot leg side to 17 inches below the top of the tubesheet on the tube repair criteria. The tube-to-tubesheet weld is not part of the tube. In addition to meeting the requirements of d.1. d.2, and d.3 below, the inspection scope, inspection methods.

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HBRSEP Unit No. 2

Amendment No. ____