



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 12, 2011

Mr. J. R. Morris
Site Vice President
Catawba Nuclear Station
Duke Energy Carolinas, LLC
4800 Concord Road
York, SC 29745

SUBJECT: CATAWBA NUCLEAR STATION, UNIT 2 (CATAWBA 2) - REVIEW OF THE
2010 STEAM GENERATOR (SG) TUBE INSPECTIONS DURING REFUELING
OUTAGE 17 END OF CYCLE (EOC 17) (TAC NO. ME5834)

Dear Mr. Morris:

By letters dated January 19, 2011 (Agencywide Documents Access and Management System (ADAMS), Accession No. ML110200322), April 5, 2011 (ADAMS Accession No. ML110980601), and June 27, 2011 (ADAMS Accession No. ML11180A269), Duke Energy Carolinas, LLC (the licensee), submitted information summarizing the results of the 2010 SG tube inspections at Catawba 2. These inspections were performed during EOC 17.

The Nuclear Regulatory Commission (NRC) staff has completed its review of the submittal and concludes that the licensee provided the information required by the Catawba 2 Technical Specifications. No additional follow up is required at this time. The NRC staff's review of the letters dated January 19, 2011, April 5, 2011, and June 27, 2011, is enclosed.

If you have any questions, please call me at 301-415-1119.

Sincerely,

A handwritten signature in black ink that reads "Jon Thompson".

Jon Thompson, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-414

Enclosure:
Staff Evaluation

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STAFF'S EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO RESULTS OF 2010 STEAM GENERATOR TUBE INSPECTIONS
PERFORMED DURING REFUELING OUTAGE 17
CATAWBA NUCLEAR STATION, UNIT 2
DOCKET NO. 50-414

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Catawba 2 has four Westinghouse Electric Company Model D5 SGs, which are designated 2A through 2D. Each SG has 4,570 thermally treated Alloy 600 tubes with an outside diameter of 0.750 inch and a nominal wall thickness of 0.043 inch. The tubes are hydraulically expanded for the full depth of the tubesheet at each end. The tubes are supported by Type 405 stainless steel support plates with quatrefoil-shaped holes. The U-bend region of the tubes installed in Rows 1 through 9 was thermally treated after bending in order to reduce stress.

The licensee provided the scope, extent, methods, and results of the Catawba 2 SG tube inspections in the documents referenced above. In addition, the licensee described corrective actions (i.e., tube plugging) taken in response to the inspection findings.

No stress corrosion cracking was observed at the top of the tubesheet or at the tube support elevations during the RFO 17.

Based on a review of the information provided, the Nuclear Regulatory Commission (NRC) staff concludes that the licensee provided the information required by their technical specifications for Catawba 2. In addition, the NRC staff concludes that there are no technical issues that warrant follow-up action at this time since the inspections appear to be consistent with the objective of detecting potential tube degradation and the inspection results appear to be consistent with industry operating experience at similarly designed and operated units.

Principal Contributor: A. Johnson

Date: September 12, 2011

Enclosure

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/RA/

Jon Thompson, Project Manager
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ADAMS Accession No. **ML11244A055**

*no significant change to memo dated 8/3/11

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