



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

April 23, 2015

Mr. Richard Michael Glover  
Site Vice President  
Duke Energy Progress, Inc.  
H. B. Robinson Steam Electric Plant  
3581 West Entrance Road  
Hartsville, SC 29550

SUBJECT: H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2 - SUMMARY OF  
FORCED OUTAGE R229F3 STEAM GENERATOR TUBE INSPECTION  
REPORT REGARDING STEAM GENERATOR TUBE INSPECTIONS DURING  
A FORCED OUTAGE IN SPRING 2014 (TAC NO. MF5001)

Dear Mr. Glover:

By letter dated September 29, 2014 (Agencywide Documents Access and Management Systems (ADAMS) Accession No. ML14282A020), as supplemented by letter dated December 15, 2014 (ADAMS Accession No. ML14365A192), Duke Energy Progress, Inc. submitted information summarizing the results of the spring 2014 steam generator tube inspections at H. B. Robinson Steam Electric Plant Unit No. 2, in accordance with the Unit No. 2 Technical Specifications, Section 5.6.8, "Steam Generator Tube Inspection Report."

These inspections were performed in March 2014 during a forced outage, because of a steam generator primary to secondary leak caused by foreign material introduced into the C steam generator during a maintenance activity on the Feedwater System during the fall 2013 refueling outage that resulted in a forced outage in spring 2014. The U.S. Nuclear Regulatory Commission staff's Steam Generator Tube Inspection Report summary is enclosed.

If you have any questions regarding this matter, please call me at 301-415-2760 or [Martha.Barillas@nrc.gov](mailto:Martha.Barillas@nrc.gov).

Sincerely,

/RA/

Martha Barillas, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-261

Enclosure:  
Steam Generator Tube Inspection Report  
Summary

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SUMMARY OF THE SPRING 2014

R229F3 STEAM GENERATOR TUBE INSPECTION REPORT

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

DOCKET NO. 50-261

TAC NO. MF5001

By letter dated September 29, 2014 (Agencywide Documents Access and Management Systems (ADAMS) Accession No. ML14282A020), as supplemented by letter dated December 15, 2014 (ADAMS Accession No. ML14365A192), Duke Energy Progress, Inc., the licensee, submitted information summarizing the results of the spring 2014 steam generator (SG) tube inspections at H. B. Robinson Steam Electric Plant Unit No. 2. These inspections were performed in March 2014 during a forced outage, which occurred during Operating Cycle 29 due to the discovery of primary-to-secondary leakage in SG C. The primary to secondary leak was caused by foreign material introduced during a maintenance activity on the Feedwater System during the fall 2013 refueling outage that resulted in a forced outage in spring 2014.

H. B. Robinson Steam Electric Plant Unit No. 2 has three Westinghouse model 44F SGs, each containing 3,214 thermally-treated Alloy 600 tubes. The tubes have a nominal outside diameter of 0.875 inches and a nominal wall thickness of 0.050 inches. The tubes are supported by stainless steel tube support plates with quatrefoil-shaped holes and V-shaped Alloy 600 anti-vibration bars.

The licensee provided the scope, extent, methods, and results of its 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.

After reviewing the information provided by the licensee, the U.S. Nuclear Regulatory Commission (NRC) staff has the following comments/observations:

- In-situ pressure testing was performed on the tube located in row 31, column 15 of SG C. The results demonstrated that the indication had structural integrity. The eddy current voltage on the array probe was higher after the in-situ pressure test and the in-situ leak rate increased with higher in-situ pressures. The tube was plugged during the outage.

Based on a review of the information provided, the NRC staff concluded that the licensee provided the information required by its technical specifications. In addition, the staff concluded that there are no technical issues that warrant followup action at this time, since the inspections appear to be consistent with the objective of detecting potential tube degradation. The staff further concluded that the inspection results appear to be consistent with industry operating experience at similarly designed and operated units.

Enclosure

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Martha Barillas, Project Manager  
Plant Licensing Branch II-2  
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**ADAMS Accession No.: ML15097A160**

\*by memo

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