

November 12, 2002

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

Subject: Duke Energy Corporation  
Oconee Nuclear Station, Unit 2  
Docket No. 50-270  
End-of-Cycle-20 Steam Generator Tube Inspection -  
Report on Indication of Circumferential Defects

The Oconee Facility Operating License, DPR-47, License Condition No. 5, requires that following each inservice inspection of Steam Generator (SG) tubes, the Nuclear Regulatory Commission be provided information concerning any circumferential crack indications identified during the inspection. The information specified by the License Condition is provided below:

1. Describe indications of circumferential cracking in the secondary side roll (lower roll in the upper tubesheet or upper roll in the lower tubesheet) if re-rolled.

Two tubes contained a circumferential indication in the upper transition of a re-rolled tube. The indications had an arc length of 106 and 200 degrees and an average depth of 78% and 63% through wall (TW), respectively. The tubes were plugged.

2. Describe indications of circumferential cracking in the original roll or heat affected zone adjacent to the tube-to-tubesheet seal weld if no re-roll is present.

Thirty-four (34) tubes had circumferential indications which had not been previously re-rolled. None of these tubes were predicted to fail due to the estimated LBLOCA axial load. All were located in the clad area near the heat-affected zone of the tube-to-tubesheet weld. All 34 tubes were re-rolled or plugged.

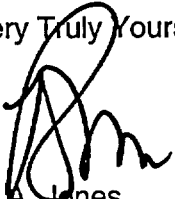
3. Provide the best-estimate total leakage that would result from an analysis of the limiting Large Break Loss of Coolant Accident (LBLOCA) based on circumferential cracking in the original tube-to-tubesheet rolls, tube-to-tubesheet re-rolls, and heat affected zones of seal welds as found during each inspection.

Duke's best estimate of the above-described leakage is 3 gpm based on circumferential indications in the re-rolled tubes. This estimate leakage would maintain offsite dose well below the limits of 10 CFR 100.

A001

Please contact Robert Douglas at 864-885-3073 with any questions regarding this submittal.

Very Truly Yours,

A handwritten signature in black ink, appearing to read 'R. A. Jones', written over a large, stylized circular flourish.

R. A. Jones  
Site Vice President,  
Oconee Nuclear Station

xc: L.A. Reyes  
Administrator, Region II

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