



W. R. McCollum, Jr.
Vice President

Duke Power

Oconee Nuclear Site
7800 Rochester Highway
Seneca, SC 29672
(864) 885-3107 OFFICE
(864) 885-3564 FAX

April 25, 2002

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

Subject: Duke Energy Corporation
Oconee Nuclear Station, Unit 1
Docket No. 50-269
End-of-Cycle-20 Steam Generator Tube Inspection -
Report on Indication of Circumferential Defects

The Oconee Facility Operating License, DPR-38, 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 rerolled.

There are no re-rolled tubes in the lower tubesheet. In the upper tubesheet there were sixty-one (61) tubes with circumferential indications identified in the upper transition of the re-roll. These indications were typically outside the pressure boundary of the re-rolled tube.

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.

Thirteen (13) tubes had circumferential indications that had not been previously re-rolled. Eleven (11) indications were located in the clad area near the heat-affected zone of the tube-to-tubesheet weld. Two (2) indications were located in the original roll transition.

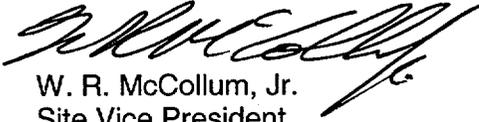
3. Provide the best-estimate total leakage that would result from an analysis of the limiting Large Break Loss of Coolant Accident (LBLOCA) based on circumferential cracking in the original tube-to-tubesheet rolls, tube-to-tubesheet rerolls, and heat affected zones of seal welds as found during each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

The best estimate leakage of the above-described indications is 2.7 gpm based on circumferential indications in the tubes. This estimated leakage would maintain offsite dose well below the limits of 10 CFR 100.

Pool

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

Very Truly Yours,



W. R. McCollum, Jr.
Site Vice President,
Oconee Nuclear Station

xc: L.A. Reyes
Administrator, Region II

M. C. Shannon

NRC Senior Resident Inspector
Oconee Nuclear Station

L. N. Olshan
NRR, Project Manager

V.R. Autry, Director
DHEC