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SUBJECT: Oconee Nuclear Station - Unit 2
Docket No. 50-287
Inservice Inspection Summary Report for Class
CC Component Examination
End of Cycle 19 Outage

Pursuant to 10CFR50.55a(b)(2)(viii), Duke Energy Corporation submits the attached ISI Summary Report for ASME Class CC In-service Inspections completed between October 1, 2002 and November 12, 2002.

Questions regarding the attached report may be directed to R. V. Hester at (864) 885-4333.

Very truly yours,

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

Attachment:

cc w/att: L. A. Reyes
L. N. Olshan
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A047

Oconee Nuclear Station, Unit 2
Class CC ISI Summary Report for
Refueling Outage EOC19

By:  Date: 2/19/03
(R. V. Hester, P.E. IWL
Responsible Engineer)

Reviewed By:  Date: 2-19-03
(Mark J. Ferlisi, P.E.)

Approved By:  Date: 2-19-03

ANII Review By:  Date: 2-19-03
(Authorized Nuclear Inservice
Inspector)

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A. ASME Code and Regulatory Requirements for Class CC ISI Summary Reports

10CFR50.55a(g)(4)(v)(C) requires that concrete containment pressure retaining components and their integral attachments, and the post-tensioning systems of concrete containments must meet the inservice inspection, repair, and replacement requirements applicable to components that are classified as ASME Code Class CC.

This inservice inspection summary report addresses requirements of 10CFR50.55a(b)(2)(viii) for inservice inspections conducted in accordance with the ASME Code, Section XI, Subsection IWL for the Oconee Unit 2 concrete containment.

The ASME Boiler and Pressure Vessel Code, Section XI, 1992 Edition with the 1992 Addenda. Article IWA-6000, Records And Reports, paragraph IWA-6210, requires the Owner to prepare inservice inspection summary reports for inservice inspections performed on Class 1 and 2 pressure retaining components and their supports.

IWA-6000 does not address inservice inspection summary reports for Class CC pressure retaining components and their supports, and the Code does not require preparation and submittal of summary reports for Class CC components. As such, this Class CC ISI Summary Report does not contain all of the information specified in IWA-6220 or IWA-6230. Please note that this report is being submitted within 90 calendar days following the completion of the refueling outage at Oconee Unit 2, in accordance with IWA-6240(b).

Duke Energy Corporation is maintaining a separate Inservice Inspection Program for Class CC pressure retaining components. Therefore, this ISI Summary Report contains only that inservice inspection information applicable to Class CC components. ISI Summary Reports for other Code Class components are submitted separately.

This Summary Report includes all applicable information as required by 10CFR50.55a (b) (2) (viii) (D).

B. General Description of Examinations and Conditions Requiring Reporting

Conditions were observed during refueling outage EOC19 that require inclusion in this Class CC ISI Summary Report, as required by 10CFR50.55a(b) (2) (viii) (D) (1) and D) (2). These conditions were identified during the performance of ASME Code, Section XI, IWL Examinations in accordance with Table IWL-2500-1, Category L-B.

Observed Conditions

Condition #1:

Free water was detected in one hoop tendon end cap. The specific tendon affected is detailed later in this report.

This condition requires reporting in accordance with 10CFR50.55a(b) (2) (viii) (D) (1).

Condition #2:

The absolute difference between the amount of filler grease removed and the amount replaced exceeded 10 percent of the tendon net duct volume for 10 tendons inspected. The specific tendons affected and the amount of exceedance is detailed later in this report.

This condition requires reporting in accordance with 10CFR50.55a(b) (2) (viii) (D) (2).

C. Detailed Description of Reportable Conditions

Condition #1:

10CFR50.55a(b) (2) (viii) (D) (1) requires when the presence of free water is detected, or the grease contains chemically

combined water exceeding 10 percent by weight, it shall be reported in the ISI Summary Report.

When the tendon cap at one end of hoop tendon 24H36 was removed, a small quantity of water (<120ml) was observed. Free water was not detected in any other inspected tendon.

Technical Evaluation

Although 10CFR50.55a(b)(2)(viii)(D)(1) does not require that an evaluation of this condition be submitted in this ISI Summary Report, an evaluation is provided below.

The metallic anchorage components of accessible ends of all tendons within the scope of this surveillance were visually inspected and grease samples were taken and analyzed. No unacceptable conditions were observed on any anchorage component inspected. The chemically combined water content of all but 2 samples was less than 1% by weight. The chemically combined water content of all samples was less than 4% by weight. In accordance with IWL 2525.2(b) the water was collected and analyzed to determine pH. The pH level was determined to be 8.36, or slightly basic. It was noted the rubber gasket at this tendon end had been cut, which would have allowed the small quantity of water discovered to enter the cap.

Condition #2:

10CFR50.55a(b)(2)(viii)(D)(2) requires when the absolute difference between the amount of sheathing filler grease removed and the amount replaced exceeds 10 percent of the tendon net duct volume, it shall be reported in the ISI Summary Report. The following table lists tendons for which the absolute difference between the amount of sheathing filler grease removed and the amount replaced exceeded 10 percent of the tendon net duct volume.

TENDON ID	ABSOLUTE DIFFERENCE BETWEEN THE AMOUNT OF SHEATHING FILLER GREASE REMOVED AND THE AMOUNT OF GREASE INSTALLED AS % of NET DUCT VOLUME
24H36	17
2D23	17
3D6	34
3D9	37
1D54	45
23V13	29

Technical Evaluation

Although 10CFR50.55a(b)(2)(viii)(D)(2) does not require that an evaluation of this condition be submitted in this ISI Summary Report, an evaluation is provided below.

The metallic anchorage components of accessible ends of all tendons within the scope of this surveillance were visually inspected. No unacceptable conditions were observed on any anchorage component. All tendons were inspected for grease coverage of the anchorage components where accessible and all were found to have adequate coverage. Experience at Oconee site has been that adequate coverage of components during initial grease filler installation prevents corrosion even if some filler material is lost due to leakage.