From: "Todd, Randall P" <rptodd@duke-energy.com>
To: "Leonard Olshan " <LNO@nrc.gov>
Date: 1/31/2007 5:40:49 PM
Subject: FW: FW: RAI Response for ONS 2 SG Inspection

In accordance with Nuclear System Directive 227 "Communicating With The U.S. Nuclear Regulatory Commission," this response has been reviewed and authorized by Graham Davenport, the Oconee Regulatory Compliance Manager, for transmittal to the NRC and for use as part of the official agency record.

-----Original Message-----

From: Downing, Parker W Jr

Sent: Thursday, August 24, 2006 1:53 PM

To: Davenport, Berry G

Cc: Clarkson, Noel T III; Smith, Judy E; Weast, James V; Gilreath,

Jeff

D; Mayes, Daniel B; Lowery, Bryce B Jr; Davis, William K

Subject: RAI Response for ONS 2 SG Inspection

Graham,

The response to the RAI's for the Oconee Unit 2 EOC22 SG inspection are inserted following each question in the note below. My understanding is that Jim Weast will be out of the office, so if someone else in ONS Reg. Compliance will be submitting the response, please send this information to them.

-----Original Message-----

From: Weast, James V

Sent: Thursday, August 17, 2006 1:56 PM

To: Robinson, Michael R; Downing, Parker W Jr; Gilreath, Jeff D

Cc: Davenport, Berry G; Clarkson, Noel T III; Smith, Judy E

Subject: FW: As promised.

Lenny sent this to me and wanted these questions answered. If you have any questions please give me a call. Thanks

-----Original Message-----

From: Leonard Olshan [mailto:LNO@nrc.gov]

Sent: Thursday, August 17, 2006 1:11 PM

To: Weast, James V

Subject: As promised.

REQUEST FOR ADDITIONAL INFORMATION

OCONEE NUCLEAR STATION, UNIT 2

2005 STEAM GENERATOR TUBE INSPECTION REPORT

Reference: Duke Energy Corporation letter dated February 23, 2006,

"Oconee Nuclear Station Unit 2, 2EOC22 Refueling Outage, October - November 2005 Steam Generator Inservice inspection 3 Month Report."

ADAMS No. ML060600449.

1. Tube 15/34 in SG A was one of several tubes with a bobbin indication labeled as "ADI." Followup examination of this tube with an array probe characterized this indication as a volumetric indication, but no flaw depth measurement is shown on the data sheets. What was the basis for dispositioning this indication as pluggable or non-pluggable?

Duke Response: The indication in Tube 15/34 was dispositioned as a manufacturer's burnish mark (MBM) based on the visual appearance of the eddy current response from the array data. This indication was also present on the pre-service baseline inspection, at which time the indication was also dispositioned as an MBM. The bobbin and array voltage and phase angle has not changed since the pre-service baseline inspection.

2. A number of tubes were identified by the array probe to contain volumetric indications in the free span region. Examples include the following tubes in steam generator A: 15/34, 79/46, 89/125, and 106/85.

Please describe the potential mechanisms for these indications.

Duke Response: The mechanism for these indications is manufacturer's burnish mark (MBM).

3. Attachment 3 of the inspection report lists array probe indications.

For support plate indications, why are there two lines of data for each indication? What does "CON" mean? What is the nature of the data shown under the headings "UTIL 1" and "UTIL 2" for the indications at the support plates? Are the numerical values shown under "UTIL 1" through wall depth measurements? If so, why is this data not used as the depth measurement of record rather than bobbin depth measurements?

Duke Response: As part of the root cause investigation into the cause of the tube wear, a special effort was undertaken to determine the circumferential orientation within the steam generator of the wear indications. The method used employs a drilled hole in the guide tube to serve as a reference position. The CON code was for designation of these orientation determinations using array data. The value reported in UTIL 1 field is the coil number of the land contact where the wear occurred. The value reported in the UTIL 2 field is the coil number for the hole in the guide tube. A tabulated value (degrees) was then determined and placed in the UTIL 2 field for the associated VOL call.

In addition to the notched guide tube method, a second method to determine orientation was used on selected tubes. This method employed a "parked" array probe in the tube adjacent to tube with the wear indication to serve as the reference position. The CON code was also used for reporting orientation data acquired with this method. To date, no orientation correlation has been established from the data that was acquired.

CC: "Gill, Robert L Jr" <rlgill@duke-energy.com>, "Davenport, Berry G"

<BGDavenport@duke-energy.com>, "Downing, Parker W Jr" <PWDowning@duke-energy.com>

Mail Envelope Properties (45C11AEB.F8E : 22 : 20366)

Subject: FW: FW: RAI Response for ONS 2 SG Inspection
Creation Date 1/31/2007 5:40:10 PM
From: "Todd, Randall P" <rptodd@duke-energy.com>

Created By: rptodd@duke-energy.com

Recipients
nrc.gov
TWGWPO03.HQGWDO01
LNO (Leonard Olshan)

duke-energy.com
PWDowning CC (Parker W Jr Downing)
BGDavenport CC (Berry G Davenport)
rlgill CC (Robert L Jr Gill)

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Files	Size	Date & Time
MESSAGE	4598	1/31/2007 5:40:10 PM
TEXT.htm	13882	
Mime.822	22021	

Options
Expiration Date: None
Priority: Standard
ReplyRequested: No
Return Notification: None

Concealed Subject: No
Security: Standard

Junk Mail Handling Evaluation Results
Message is eligible for Junk Mail handling
This message was not classified as Junk Mail

Junk Mail settings when this message was delivered
Junk Mail handling disabled by User
Junk Mail handling disabled by Administrator

Junk List is not enabled
Junk Mail using personal address books is not enabled
Block List is not enabled