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To: [Redacted] David Lew, Gregory Cranston
Date: Wed, Jul 19, 2000 11:36 AM
Subject: Outline/Format for IR

See what you think about the genratl format.

CC: Brian Holian

Information in this record was deleted
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Act, exemptions b6
FOIA- 2001-0256

6/30

(4)

Report Details

BACKGROUND

Summary of Plant Event

Following the steam generator (SG) tube failure on February 15, 2000, Con Edison took the Indian Point 2 nuclear plant to a cold shutdown condition. Con Edison conducted an evaluation and found that the tube that failed was row 2 column 5 (R2C5) in SG 24. This tube had cracked at the apex of the u-bend, due to primary water stress corrosion (PWSCC) cracking. Con Edison conducted SG Eddy Current inspection in all the SG and conducted visual inspections of the steam side of the SGs. During these ET inspections Con Edison noted that greater than 1% of the tubes were found with defects placing them in a condition that required NRC approval of a restart. At the conclusion of the inspection the unit remained in cold shutdown pending NRC restart approval.

Indian Point 2 Steam Generator History

The team compiled a history of the Indian Point 2 SG as part of the information gathering phase, the history starting from initial operation is Attachment 2.

Brief discussion of what led up to the event from 1995 - Wayne

EPRI Guidance - How it fits with TS and Regulations

Wayne

Eddy Current Technique

Wayne

Applicable SG Degradation Mechanisms

PWSCC/Denting/Hourglassing - Greg

1. **REACTOR SAFETY (R)**

Cornerstones: Barrier Integrity (BI) and Initiating Events (IE)

Special Inspection (S)

1BIS REVIEW OF 1997 U-BEND INSPECTION (Special Inspection- Cornerstone REACTOR SAFETY - Barriers)

1BIS1 Flaw Detection/Identification

a. Inspection Scope - Ian

Technique Qualification
Noise Signals

1997 Failure to Detect U-bend indications

b. Issues and Findings

1997 data contained significant noise possible due to deposits on the U-bends tubes. This issue was not identified by Con Edison. Techniques to minimize the effects of the noise on data quality were not used and a care full review of noise data was not taken.

1BIS2 Data Analysis Guidleline Review -lan

a. Inspection Scope

b. Issues and Findings

1BIS3 Analysis Training Review - lan

a. Inspection Scope

b. Issues and Findings

1BIS4 Steam Generator Secondary Side Conditions - Greg

a. Inspection Scope

Denting

Hourglassing Inspection/TS Requiremnt

1IES5 Event Risk Significance Core Damage Frequence and Large Early Release -
SRA/Wayne

**40A. OTHER ACTIVITIES (OA)
Special Inspection (S)**

4OAS1 Review of 1997 U-Bend PWSSS Indications - Wayne

a. Inspection Scope

b. Issues and Findings

4OAS2 Review of Root Cause Analysis - Wayne

a. Inspection Scope

b. Issues and Findings

4OAS3 Independent QDA/ QA Audits- Surveillances - Wayne

a. Inspection Scope

b. Issues and Findings

4OA3 Overall Conclusion on 1997 U-Bend Inspection Program - Wayne

a. Inspection Scope

b. Issues and Findings

4OAS4 Management Meetings

.1 Exit Meeting Summary

On Team presented their overall findings to members of Con Edison management led by Mr. A. Alan Blind. Con Edison management acknowledged the findings presented and agreed with the Team's conclusions. The \$\$\$\$\$\$\$\$ some Westinghouse proprietary information. The proprietary information was reviewed and returned to Con Edison and was not included in the report.

During the exit, the \$\$\$\$\$\$\$\$ violations were discussed related to this inspection and two additional non-cited violations related to a Regional inspector's review of the permanent modification area. Should Con Edison management elect to contest these NCVs, a written response should be provided within 30 days of the date of this inspection report, with the basis for their denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Indian Point 2 facility.