EX 6 EX 6

From: Wayne Schmidt
To: "Doddc[redacted]", "tees[redacted]", Bill Bateman, David Lew, Gregory Cranston, Hubert J. Miller(...)
Date: Tue, Jul 18, 2000 1:21 PM
Subject: Most recent

Please see the attached - there were several minor changes made since the last e-mail. We removed contractor oversight and added technical direction of activities.

Stephanie and Bill we would like to get Jack S' buy-in on this today - is there an open 30 minute block of time?

Information in this record was deleted in accordance with the Freedom of Information Act, exemptions 6
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ITEM # 54

(3)

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Indian Point 2 Steam Generator Special Inspection Summary

Following the failure of a steam generator tube on February 15, 2000, the NRC conducted a special team inspection to assess the adequacy of Con Edison's 1997 steam generator inspections. The NRC team members included personnel from the Office of Nuclear Reactor Regulation and Region I, as well as NRC-contracted specialists in steam generator eddy current testing.

The team conducted an exit with Con Edison on July 18, 2000. This summary provides the preliminary team findings, which are subject to NRC management final review. The overall significance determination for this event is also still under evaluation. NRC inspection report No. 50-247/2000-010 will document the team's findings and the significance determination of the event.

The team concluded that Con Edison failed to implement an effective steam generator inspection program in 1997, as evidences by deficient corrective actions and poor overall technical direction of activities. This lack of program quality contributed to the February 15, 2000, tube failure, in that detectable flaws in low radius U-bend tubes, including the tube that failed, were not identified. Con Edison missed several opportunities to adjust the program to compensate for significant eddy current data collection and analysis weaknesses and specific steam generator conditions.

More specifically Con Edison missed opportunities to:

1) compensate for high noise signals in the low radius U-bend areas; these high noise signals negatively affected flaw detection capability;
2) take adequate corrective actions following identification of a new tube degradation mechanism, i.e., inside diameter (ID) primary water stress corrosion cracking (PWSCC) at the apex of a low radius U-bend tube;
3) establish a mechanism to monitor flow slot hourglassing as required by plant technical specifications.
4) sufficiently assess the potential for flow slot hourglassing following the identification in 1997 of eddy current probe restrictions in the upper support plate, especially in conjunction with the identification of a PWSCC flaw located in the apex region of a low row U-bend tube.
5) properly set-up the U-bend plus-point eddy current probe, which affected the probability of detection of U-bend indications. The probe was not set-up with the proper calibration standard or with the phase rotation specified by the EPRI qualified technique sheet.

Failure to address these issues caused significant limitations and uncertainties relative to the detectability of tube flaws in the low radius U-bend area. Collectively, this indicated weaknesses in the identification of significant adverse conditions and poor overall technical direction in assuring a quality steam generator inspection in 1997.

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The team also concluded that Con Edison's root cause analysis for the event, dated June 14, 2000, did not adequately address their failure to identify deficiencies and limitations related to the 1997 inspection of the low radius U-bend regions. While the root cause analysis attributed the tube failure to a flaw that was obscured by eddy current signal noise, it did not identify nor address inadequacies in the management of the 1997 steam generator inspection.