

From: Marc Ferdas
To: David Lew
Date: Wed, Feb 21, 2001 8:56 AM
Subject: File Requested

Attached is the file containing the letter

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A1138

EA-00-179, EA-01-033

Mr. John Groth
Senior Vice President - Nuclear Operations
Consolidated Edison Company of
New York, Inc.
Indian Point 2 Station
Broadway and Bleakley Avenue
Buchanan, NY 10511

SUBJECT: CON EDISON RESPONSE, DATED JANUARY 19, 2001 TO THE NOTICE OF VIOLATION ISSUED BY THE NRC ON NOVEMBER 20, 2000, FOR A VIOLATION THAT OCCURRED AT INDIAN POINT 2

This refers to your letter, dated January 19, 2001, from Mr. J. Baumstark, in response to the Notice of Violation issued by the NRC on November 20, 2000 for a violation that occurred at Indian Point 2. The violation involved the failure, in 1997, to fully identify and correct a significant condition adverse to quality involving the steam generators at your facility, despite opportunities during the 1997 steam generator inspections to do so. The significant condition adverse to quality entailed the presence of primary water stress corrosion cracking (PWSCC) flaws in four Row 2 steam generator tubes, in the small radius low-row U-bend apex area. This significant condition adverse to quality was not identified and corrected during the 1997 steam generator inservice inspection, because of the failure to adequately account for conditions that adversely affected the detectability of, and increased the susceptibility to, tube flaws.

In your January 19 response, you denied that the violation occurred. As a basis for the denial, you contended that the 1997 steam generator tube inservice examination at Indian Point 2 was conducted in accordance with the industry guidelines and requirements applicable at the time. You noted that the NRC inspection report, upon which the Notice of Violation was based, does not reference any requirement, industry standard, benchmark, or guidance that was not met in 1997 which could have led to a failure to detect PWSCC tube defects.

In your denial, you also indicated that the ease of discovery should be fully considered in evaluating licensee problem identification and resolution. While acknowledging that it is clear that the PWSCC indication was not identified in the case of tube Row 2 Column 5 of steam generator 24, you maintained that the ease of discovery regarding the subject indication was questionable. You also provided several affidavits prepared by individuals with experience in steam generator inspection and eddy current testing, which you attest found your performance to be acceptable.

The NRC has carefully reviewed and considered your entire response, including the bases that you have provided for denial of the violation. Based on our review, we have concluded that no additional information was presented that would alter the NRC's conclusion that a violation existed. The information in your letter was not substantially different than provided to the NRC

during the NRC special inspection and subsequent meetings, including during the regulatory conference conducted on September 26, 2000.

10 CFR 50, Appendix B, Criterion XVI, requires in part, that significant conditions adverse to quality be evaluated and actions taken to prevent recurrence. This regulation recognizes that prescriptive requirements cannot be written for every condition that may be encountered, particularly in the case of plant specific conditions. Therefore, when such conditions are encountered, licensees must take actions that are commensurate with the significance of the conditions.

Adherence to industry guidelines and requirements does not necessarily satisfy the requirements of 10 CFR50 Appendix B, Criterion XVI. As documented in NRC inspection report 50-247/2000-010, Con Edison encountered significant eddy current test signal interference (i.e. high noise), tube restriction in the upper support plate of the low row tubes that indicated the potential for hourglassing, and a PWSCC indication in the apex of a low row tube during the 1997 steam generator inspections. Based on industry information, Con Edison should have recognized that these conditions were significant and adversely affected the detectability of, and increased susceptibility to, PWSCC at the apex of low row u-bends. Despite opportunities, Con Edison did not recognize and take appropriate corrective actions to adequately evaluate and account for these conditions.

While the NRC does not intend to prescribe what Con Edison should have done in response to the conditions encountered by Con Edison in 1997, the NRC believes that adequate evaluations and corrective actions in response to the significant identified conditions encountered and known industry information during 1997, would have reasonably prevented leaving the flaws in the low row u-bends in service. The high signal noise in areas susceptible to PWSCC (i.e., the low row u-bends) could have been accounted for in the inspection program. Adjustments could have been made to perform a more in-depth interrogation of available data associated with those susceptible areas or, if conditions prevented the detection of flaws, actions could have been taken to simply plug the potentially affected tube. Neither of these adjustments were considered in 1997, although the NRC considers that it was reasonable for you to have done so given these factors. Therefore, your evaluation of these conditions and corrective actions at the time were not adequate and contributed to leaving tubes with PWSCC flaws in the low row tube in service.

For these reasons, the NRC has concluded that the violation remains as cited in the Notice. Although you denied the violation, we note that you agree that corrective actions are needed to improve your steam generator inspection program. We have noted the planned actions stated in your letter and have no further questions at this time. We will review these actions during future inspections. Therefore, no response to this letter is required.

Additionally, your response and the associated affidavits contain a number of statements, which the NRC and Con Edison are not in agreement. While we do not intend to address each of these, we have provided clarification of those statements that do not accurately represent NRC staff positions reflected in generic NRC documents. These clarifications are included in Attachment 1 of this letter.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its attachment will be available electronically for public inspection in the NRC Public Document

Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).