

PDR



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

May 13, 1992

The Honorable Joseph R. Biden, Jr.
United States Senate
Washington, D.C. 20510-0802

Dear Senator Biden:

This is in response to your letter of April 2, 1992, concerning the November 9, 1991, turbine generator failure at the Salem Generating Station. In particular, you raised several thoughtful concerns largely with the NRC's decision to mitigate a civil penalty assessed against the licensee, and with the NRC's regulatory activities in general as they relate to the Salem facility.

Be assured that the NRC's chief concern resulting from this event has been and remains that the event was preventable and that the underlying causes could potentially affect nuclear safety under other circumstances. The decision to mitigate the penalty is not an indication of diminished concern by the NRC of the significance of the event.

Enclosure 1 contains additional information concerning mitigating factors under our Enforcement Policy relating to the November 9 event and the issues you raise. Mitigation is intended to encourage actions on the part of the licensee that will identify deficiencies and root causes of events and which help to prevent recurrence of events. For example, the Salem licensee identified one of the root causes of the November 9 event and is implementing procedures to correct its process for tracking commitments. While the NRC is satisfied, at this point, that appropriate actions are underway to ensure that underlying causes are being addressed and to prevent events of similar nature, the NRC will monitor the licensee's efforts closely and will not hesitate to take any future actions appropriate to effect necessary changes in operations or attitude.

Enclosure 2 addresses NRC's requirements as they relate to safety-related equipment and non-safety-related equipment with specific references to our actions at Salem. Your letter raises a number of issues concerning the scope of NRC's regulations in general. For example, the problem with the binding of solenoid valves, which you cited in your letter, involves equipment not subject to NRC's quality assurance requirements. The Commission and the NRC staff have periodically examined our role in overseeing balance of plant systems and components. We have

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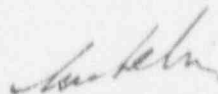
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adopted a maintenance rule requiring licensees to establish programs to monitor the effectiveness of maintenance activities including balance of plant equipment but this rule is not yet in force pending development of supporting implementation guidance. We continue to develop probabilistic methods intended to measure the contributions of systems and components -- "safety-related" or not -- to risk.

These evolving activities and others already in existence, like the SALP process and the team inspection programs, help ensure that activities in the balance of plant area which could impact on safety are not ignored but receive appropriate attention.

The NRC is committed to ensuring that the lessons learned from the November 9 event are fully understood and that corrective actions are taken to address the deficiencies identified; we will keep you and your staff informed of the licensee's corrective actions.

Sincerely,



Ivan Selin

Enclosures:

1. Mitigating Factors
2. NRC Regulatory Requirements -
Salem

MITIGATING FACTORS

The staff's decision to mitigate the penalty is not an indication of diminished concern by the NRC of the significance of the event. Mitigation is intended to encourage actions on the part of the licensee that will identify deficiencies and root causes of events and which help to prevent recurrence of events. This enforcement action was in conformance with the provisions of the Enforcement Policy and reflected an appropriate exercise of judgment for the circumstances of the case.

The mitigation is not given for reporting the obvious, but for getting to the root cause of the event. In this case, the licensee identified the failure of its staff to communicate and correct the results of the testing of the turbine performed on October 20, 1991, which is one of the root causes of the event and is the basis of the violation at issue. Therefore, some mitigation was warranted for the licensee's root cause identification effort.

As to corrective actions, the fact that the licensee failed to implement its earlier commitment to replace the solenoid valves, as detailed in the cover letter to the Notice of Violation, was of concern to the NRC. However, rather than being a case in which a licensee ignored a commitment, the NRC's Augmented Inspection Team found a significant flaw in the method used by the licensee to track such commitments which contributed to that failure. Enforcement action was not taken for this failure because it did not constitute a violation of the Commission's requirements -- the solenoid, not being safety-related equipment, was not subject to the Commission's quality assurance requirements. Nevertheless, the licensee is implementing procedures to correct this process. The staff will be monitoring these corrective actions.

As to the licensee's past performance, the last two years of performance are normally considered in evaluating this factor. On balance, NRC assessment of this licensee's performance up to the November 1991 event was found to warrant one half of the mitigation allowed under that civil penalty adjustment factor. In that regard, the most recent SALP report noted improvements in control room communications and conduct of operations.

With respect to the prior notice factor, although the licensee had prior notice of problems with mechanical binding of identical solenoid valves in Unit 1, no adjustment on this factor was

warranted because the primary focus in this case was the performance of the NRC licensed operators on October 20, 1991, rather than the maintenance of the solenoids. The failure of operators to respond to the deficient test results on October 20, 1991, was viewed as the most significant reason that this event was not prevented by the licensee.

A civil penalty was not assessed by the NRC staff based on its evaluation of these mitigation factors. Although a civil penalty was not assessed, a Severity Level III violation is a matter of significant regulatory concern and may adversely affect a licensee's Systematic Assessment of Licensee Performance (SALP) ratings, or result in escalation of future proposed civil penalties due to past poor performance.

NRC REGULATORY REQUIREMENTS - SALEM

"Safety-related" equipment is that equipment used in conjunction with the nuclear steam supply system which is relied upon to ensure the integrity of the reactor coolant pressure boundary, the capability to shut down the reactor and maintain it in a safe shutdown condition, and the capability to prevent or mitigate the consequences of accidents which could cause undue risk to the health and safety of the public. "Non-safety-related" is everything else in the balance of plant. Some of the non-safety-related equipment is very useful both in avoiding an emergency and in dealing with one, but it is not itself necessary for reactor safety.

The Commission periodically examines the extent to which it should oversee balance of plant systems and components. For example, our recently adopted rule (10 CFR 50.65, adopted July 10, 1991) requiring licensees to establish programs to monitor the effectiveness of maintenance activities explicitly recognizes that inclusion of balance of plant equipment in the program is necessary and proper. Equipment to be monitored includes non-safety-related components: 1) relied upon to mitigate accidents; 2) whose failure could prevent functioning of safety related equipment; and 3) whose failure could cause a reactor scram or actuation of a safety related system.

Under current rules and practice NRC does not routinely review or approve the design detail nor the operational procedures for non-safety-related equipment, nor is it routinely inspected by NRC, except with respect to the effect such equipment may have on the overall safe nuclear operation of the facility. For example:

NRC reviews the design of the turbine to the extent of assuring that the nuclear reactor and other nuclear safety equipment is protected against turbine missiles by orientation or otherwise;

NRC reviews features of the turbine and its auxiliary equipment to the extent of assuring the nuclear reactor and safety-related equipment are protected against potential fire hazards from such balance of plant equipment.