



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

JAN 22 1990

Docket Nos. 50-313
50-368
License Nos. DPR-51
NPF-6
EA 89-220

Arkansas Power & Light Company
ATTN: Gene Campbell, Vice President
Nuclear Operations
Post Office Box 551
Little Rock, Arkansas 72203

Gentlemen:

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY - \$75,000
(NRC INSPECTION REPORT NO. 89-34)

This is in reference to the NRC team inspection conducted September 18-22, 1989, the results of which were documented in an inspection report issued November 13, 1989, and to the discussion of the inspection findings at a December 8, 1989, enforcement conference in NRC's Arlington, Texas office and during a follow-up conference call on December 15, 1989.

The inspection was prompted by NRC's September 1989 identification of wiring discrepancies in an electrical panel in the Arkansas Nuclear One (ANO), Unit 1 control room. The discrepancies were identified by NRC's Diagnostic Evaluation Team (DET) during its evaluation of ANO and involved deviations between the actual control circuit wiring for a service water pump and the applicable wiring diagrams. The DET review followed up on your 1988 identification of wiring discrepancies in switchgear cabinets.

AP&L's investigation of this matter resulted in a determination on September 13, 1989, that these wiring discrepancies would have prevented the automatic restart of two of ANO Unit 1's three service water pumps under certain conditions following an automatic reactor trip, and that this condition had existed since 1974 when the plant began operations. Thus, under certain conditions which are described in detail in the appendix to NRC's inspection report, two of three service water pumps would have been temporarily incapable of performing their intended safety function -- to provide cooling water to other safety-related plant equipment including emergency diesel generators, emergency feedwater pumps, and both high pressure and low pressure safety injection pumps. While sufficient cooling water might have been available had the third and unaffected

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(by the wiring discrepancies) service water pump been operable, ANO Unit 1's Technical Specifications require at least two of the three service water pumps to be operable or the plant is to be shut down within 36 hours.

Although immediate actions were taken by AP&L to resolve this particular wiring discrepancy and extensive long-term actions were developed to examine the extent of wiring problems, NRC considers this a matter of significant safety concern. AP&L officials at the enforcement conference, while recognizing the broader implications of this finding, stated that there is little safety significance associated with the specific service water pump wiring flaws because of the unlikely sequence of events necessary to render two of the three pumps incapable of performing their intended function. The elements needed for this particular scenario to occur are established under accident conditions with initiation of an engineered safety feature (ESF) signal. The only failure necessary is the failure of the "fast transfer" of the service water pump electrical power sources. This "fast transfer" is a nonsafety related feature at ANO, Unit 1. Also, NRC notes that the "slow transfer" of service water pump electrical power sources, an essential element of this scenario, is designed to occur if the expected "fast transfer" does not occur, and that ANO Unit 1 has experienced such "slow transfers" on at least four occasions during the past. Furthermore, given the complexity of this problem, NRC is not convinced, as AP&L officials suggested during the enforcement conference, that prompt operator action to restart these pumps is likely to have occurred in an emergency situation. AP&L's position regarding the low probability of these events, provided in the December 15th conference call, has been considered. In NRC's view, the likelihood of this sequence of events occurring under accident conditions is greater than AP&L suggests and is therefore safety significant.

NRC views this problem as indicative of the type of weaknesses that are described in the recently issued report of the Systematic Assessment of Licensee Performance (SALP) for ANO Units 1 and 2. In particular, it is indicative of AP&L's historical weaknesses in maintaining strict control of the plant design and configuration and, in that more effective corrective actions for other identified discrepancies might have led to the discovery of this problem earlier, weaknesses in effecting broad-based and timely corrective actions once problems are discovered. However, NRC believes that the many initiatives AP&L has taken to address these matters, which were summarized during the enforcement conference and have been the subject of other meetings with NRC, are beginning to produce positive results. With specific regard to AP&L's corrective actions for the wiring problems that are the subject of this correspondence, NRC views AP&L's actions as thorough and complete once AP&L establishes a timetable for bringing to completion the long-term elements of its corrective action plan.

To emphasize the importance of maintaining ANO, Units 1 and 2, in accordance with its design such that the operability of important safety equipment is assured, I have been authorized, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Materials Safety, Safeguards and Operations Support, to issue the enclosed Notice of Violation

and Proposed Imposition of Civil Penalty in the amount of Seventy Five Thousand Dollars (\$75,000) for the violation described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1989) (Enforcement Policy), the violation described in the enclosed Notice has been categorized at Severity Level III.

The NRC staff has reviewed your December 18, 1989 letter which, in part, provided additional information and arguments specific to the deficiency described in the enclosed Notice. The NRC staff concludes that the deficiency is appropriately considered as NRC-identified in that, the DET and not AP&L personnel identified the discrepancy between the as-built and specified wiring configurations. The NRC staff finds that enforcement discretion under either Section V.G.3 or V.G.4 of the Enforcement Policy is not warranted because NRC identified the deficiency and AP&L's actions concerning this matter were taken in response to its identification. However, AP&L's actions were given due consideration in assessing the proposed civil penalty as reflected by the application of 50% mitigation for corrective actions.

The base value of a civil penalty for a Severity Level III violation is \$50,000. The escalation and mitigation factors in the Enforcement Policy were considered and the base civil penalty amount in this case has been increased by 50 percent. In making this decision, NRC considered AP&L's corrective actions for this problem worthy of 50 percent mitigation; AP&L's past performance in the areas of concern (design control and corrective action programs) worthy of 50 percent escalation; and the fact that this problem was identified by NRC worthy of an additional 50 percent escalation.

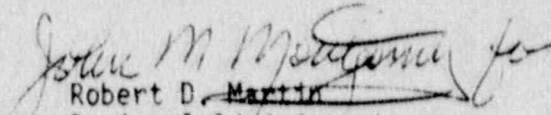
Other apparent violations described in the inspection report that is the subject of this correspondence and apparent violations described in other reports discussed at the December 8, 1989, enforcement conference were not considered for escalated enforcement action. These violations were the subject of a separate Notice of Violation issued January 4, 1990.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. In doing so, you may make reference to correspondence or other information previously provided to NRC. The NRC will review your response to this Notice, including your proposed corrective actions, and the results of future inspections to determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,


Robert D. ~~Martin~~
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

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Arkansas Power & Light Company -6-

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