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Mr. A. Bert Davis Regional Administrator U.S. Nuclear Regulatory Commission Region III 799 Roosevelt Road Glen Ellyn, IL 60137

> Subject: Dresden Nuclear Power Station Units 2 and 3 Status Report Concerning Improvements to Isolation Condenser Makeup Systems NRC Docket Nos. 50-237 and 50-249

- References (a): Letter from J.A. Silady to A.B. Davis dated September 18, 1989, transmitting status of CECo review of alternate water sources for the Isolation Condensers at Dresden 2 and 3
  - (b): Letter from W.D. Shafer to Cordell Reed dated June 16, 1989, transmitting NRC Inspection Report Nos. 50-237/89012 and 50-249/89011.
  - (c): Letter from J.A. Silady to A.B. Davis dated July 21, 1989 responding to Reference (b) concern on Isolation Condenser Makeup.

Mr. Davis:

This letter provides an update concerning our evaluation of long term improvements to the Dresden Units 2 and 3 Isolation Condenser shell side clean demineralized water supply systems. These improvements, as described in Reference (a), have been divided into three phases which are reviewed below.

## REVIEW OF CECO PLANS

The first phase was to implement Isolation Condenser operating procedure revisions to restrict the use of condensate storage water for isolation Condenser shell side makeup. These revisions, which involve use of service water for Isolation Condenser shell side makeup and/or use of alternate methods for reactor pressure control such as the High Pressure Coolant Injection system and/or the Main Steam Relief Valves, were implemented on May 26, 1989.

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A second phase design improvement involves a power supply modification that is currently under review. This modification proposal involves supplying 480V AC power to the Isolation Condenser shell side motor-operated clean demineralized water fill valves. The tentative schedule for implementing this phase (first quarter 1991) from Reference (a) may change as a result of the evaluation discussed below under "current status".

The third and final phase currently undergoing conceptual design consists of installing two diesel driven pumps for supply of clean demineralized water to the shell side of the Isolation Condensers from the clean demineralized water storage tank. The pumps are intended to be housed in an enclosure attached to the south wall of the Unit 2 Reactor Building. This alternative provides several advantages over the original emergency power makeup source. These include:

- Elimination of contaminated condensate storage water as a source of Isolation Condenser shell side makeup during loss of off-site power conditions;
- 2. Increased clean demineralized water makeup flow capacity;
- 3. Negligible increase on Station emergency electrical power loading; and
- Use of an existing large volume of clean demineralized water which reduces installation costs.

The tentative installation schedule for this third phase is during the respective unit refueling outages at the end of Cycle 13 in 1992.

## CURRENT STATUS

A preliminary review of the existing 10 CFR 50, Appendix R Safe Shutdown Analysis has determined that the Phase 2 design proposal would have an impact on the 10 CFR 50, Appendix R Safe Shutdown Analysis. The major impact of the Phase 2 design proposal is loss of the 2B Condensate Transfer pump as a Safe Shutdown component. The Dresden Station Safe Shutdown Report currently credits the 2B Condensate Transfer pump initial makeup water to the Isolation Condenser shell side. Three options are currently being reviewed to resolve this concern.

## A.B. Davis

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Option A is only to credit the redundant 2A Condensate Transfer pump as a Safe Shutdown component. This would result in entry into a seven day Limiting Condition for Operation upon any failure of the 2A Condensate Transfer pump in accordance with the approved Fire Protection Program. Option B is to add the 2/3 B Clean Demineralized Water pump and fill valves as Safe Shutdown components in place of the 2B Condensate Transfer pump. This would require thorough separation requirements and spurious operation analyses. Additionally, both Option A and Option B would require revision of the Safe Shutdown Report and appropriate Safe Shutdown Procedure revisions. Option C is to cancel the Phase 2 design proposal and continue with the implementation of the Phase 3 design proposal. The Safe Shutdown analysis review process has not revealed any concerns regarding the implementation of Phase 3, other than appropriate revisions to the Safe Shutdown Report and Safe Shutdown Procedures.

A final update concerning resolution of the Phase 2 design proposal will be provided within two months.

Please direct any questions you may have regarding this topic to this office.

Very truly yours,

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J.A. Silady Nuclear Licensing Administrator

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cc: B.L. Siegel - Project Manager, NRR S.G. DuPont - Senior Resident Inspector, Dresden