



Nebraska Public Power District

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March 22, 1984

Director of Nuclear Reactor Regulation
Operating Reactors Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Mr. Domenic B. Vassallo, Chief

Reference:

1. Letter from H. R. Denton to All Operating Light Water Reactors, September 17, 1979
2. Letter from J. M. Pilant to H. R. Denton, October 8, 1979
3. Letter from J. M. Pilant to D. B. Vassallo dated May 20, 1983

Dear Mr. Vassallo:

Subject: Determination of Equipment Within
the Scope of 10CFR50.49(b)(2)

Paragraph (b)(2) of 10CFR50.49 requires that licensees identify "Nonsafety-related electric equipment whose failure under postulated environmental conditions could prevent satisfactory accomplishment of safety-functions..." The District originally performed this analysis with the results documented in Reference 2. However, several new analyses and evaluations have been performed since that time. Therefore, the previous assessment has been modified to include the impact of a revised HELB study, and the further equipment requirements identified in I.E. Bulletin 79-01B, 10CFR50.49, and Reg. Guide 1.97.

The re-evaluation was performed using the following methodology to identify the subject equipment:

1. A list was generated of safety-related electric equipment as defined in Paragraph (b)(1) of 10CFR50.49 required to remain functional during or following design-basis Loss of Coolant Accident (LOCA) or High Energy Line Break (HELB) accidents. The LOCA/HELB accidents are the only design-basis accidents which result in significantly adverse environments to electrical equipment which is required for safe shutdown or accident mitigation. This list was based

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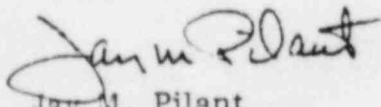
on reviews of the Piping and Instrument Diagrams (P&ID's), Electrical Elementary Diagrams, and Electrical Distribution Diagrams.

2. The elementary wiring diagrams of the safety-related electrical equipment identified in Step 1 were then reviewed to identify any auxiliary devices electrically connected directly into the control or power circuitry of the safety-related equipment (e.g., automatic trips) whose failure due to postulated environmental conditions could prevent the required operation of the safety-related equipment.
3. Next, the operation of the safety-related systems and equipment were reviewed to identify any directly mechanically connected auxiliary systems with electrical components which are necessary for the required operation of the safety-related equipment (e.g., cooling water or lubricating systems).
4. Finally, the nonsafety-related electrical circuits indirectly associated with the electrical equipment identified in Step 1 by common power supply or physical proximity were considered by a review of the original Cooper Station electrical design.

The systems and equipment generated in Steps 2, 3, and 4 above were then compared to the "Master List of Electrical Equipment at Cooper Nuclear Station for 10CFR50.49" dated May 20, 1983, Reference 3. Components have been added and removed as a result of internal reviews by CNS Plant Engineering, consultants, and further engineering studies. All of the added equipment was determined to meet the classification of paragraph (b)(1) of 10CFR50.49. No additional equipment was found to be applicable to (b)(2) of 10CFR50.49.

If you have any questions regarding this matter, please contact my office.

Sincerely,



Jay M. Pilant
Technical Staff Manager
Nuclear Power Group

JMP/kcw:emz20/4

cc: NRC Distribution
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D. A. Wacha

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