



Nebraska Public Power District
Nebraska's Energy Leader

NLS2001057

July 6, 2001

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Gentlemen:

Subject: IPEEE Staff Evaluation Report Clarification and Commitment Status Update
Cooper Nuclear Station, NRC Docket 50-298, DPR-46

- References:
1. NRC Letter, "Cooper Nuclear Station – Review of Individual Plant Examination of External Events (TAC No. 83611)" from Mohan C. Thadani to J. H. Swailes (NPPD) dated April 27, 2001.
 2. CNS Letter NLS960143, "Individual Plant Examination for External Events (IPEEE) Report – 10 CFR 50.54(f)" from G. R. Horn (NPPD) to USNRC dated October 30, 1996.

The Nuclear Regulatory Commission (NRC) issued to Nebraska Public Power District (District) its review of the Cooper Nuclear Station (CNS) Individual Plant Examination of External Events (IPEEE) Report in Reference 1. The accompanying staff evaluation (SE) report concluded that the licensee's IPEEE process is capable of identifying the most likely severe accident vulnerabilities, and therefore, the CNS IPEEE has met the intent of Supplement 4 to Generic Letter (GL) 88-20, "Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities," dated June 28, 1991. The District agrees with the conclusions of the evaluation as stated in the SE. However, during our review of the NRC letter and SE report, we identified certain clarifications and commitment status updates that are appropriate to make concerning the use of individual contributions to core damage frequency (CDF), and the licensee actions regarding Fire Related Improvements, and the HFO-Related Improvement called out in the NRC's letter in Reference 1 (HFO is an abbreviation for high wind, flood and other events).

Clarifications

With regard to individual contributions to CDF on page 3 of the SE report (Reference 1), Section 2.2, Dominant Contributors, second paragraph, the NRC states, "Other areas that were evaluated, but whose frequency was below the screening criteria of 10^{-6} /ry, resulted in a combined frequency of 7.1×10^{-6} /ry for a total CDF related to fire events of 1.6×10^{-5} /ry." As a clarification

to this statement, it should be noted that the District did not calculate or report a total CDF value related to fire events in the IPEEE Report (Reference 2). The individual values provided in the IPEEE report are screening values based on EPRI Fire Induced Vulnerability Evaluation (FIVE) methodology and, therefore, do not lend themselves to being combined into a total CDF value. These values represent conservative upper bounds for the respective CDF contributions, not the median or mean values for the actual CDF contributions themselves. Thus, the summation of the four screening values may overstate the actual CDF attributable to postulated fire scenarios. However, the District finds it appropriate that the NRC reflected (Reference 1) the four individual contributions in terms of percentages to a total CDF value. The order and risk ranking provide a useful overview of the relative risks associated with each contributor.

Licensee Action Item Status Updates

On page 2 of the cover letter associated with Reference 1 the NRC summarizes three licensee action items related to two fire-related improvements and one HFO-related improvement that, at the time of the IPEEE submittal (Reference 2), required additional actions. Since NRC identified these action items the District is treating them as commitments. The following restates each of the three commitments (in the order and format delineated in Reference 2, page 2 of the cover letter) and the associated status:

“Fire-Related Improvements

- Fires in Board C and Vertical Board F in the control room were identified as completely disabling the control of the switchyard breakers. The licensee indicated that they were examining additional (unspecified) features that would allow for control of the switchyard breakers either from the switchyard itself or from an alternate area, or having a preplanned recovery /repair action in place.
- A fire in the SW pump house could disable all the pumps and one of the motor-driven fire water system pumps, especially if the fire suppression system fails. The licensee stated that it was examining the feasibility of providing the SW System with water supplies that are diverse from the pumps in the SW pump room.”

The two above summarized commitments were derived from the IPEEE submittal (Reference 2), page 7-5. Status: During the course of developing the Severe Accident Management Program, CNS examined each of these improvements. For the switchyard improvement (first bullet) the overall plant CDF would result in less than a 0.5% decrease, and for the SW System improvement (second bullet) the overall plant CDF would result in less than a 3% decrease. For both of these improvements, the District concluded that these minor reductions in overall plant CDF are not considered adequate to justify the costs of potential modifications. Therefore, modifications related to these two improvements will not be further pursued.

“HFO-Related Improvement

- The diesel generator exhaust system is unprotected from postulated tornado generated missiles. The licensee is expected to address the resolution of this issue in the future as part of the IPEEE Issue Resolution Plan for CNS.”

This summarized commitment was derived from the IPEEE submittal (Reference 2), page 5-8. Status: This item was evaluated and resulted in a hardware modification that significantly improved protection of the diesel generator exhaust system from tornado generated missiles. The modification involved elimination of the bypass valves for the diesel generator mufflers and eliminated the failure mode described in the CNS submittal, Reference 2. The modification was completed in 1998.

The above clarifications and commitment status updates are offered as such and do not impact the NRC’s finding that the CNS IPEEE has met the intent of Supplement 4 to Generic Letter 88-20, and therefore, no further action is required.

Should you have any questions concerning this matter, please contact Mr. D. F. Kunsemiller at (402) 825-5236.

Sincerely,



John H. Swailes
Vice President of Nuclear Energy

/dnm

cc: Regional Administrator
USNRC - Region IV

Senior Project Manager
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ATTACHMENT 3 LIST OF NRC COMMITMENTS

Correspondence No: NLS2001057

The following table identifies those actions committed to by the District in this document. Any other actions discussed in the submittal represent intended or planned actions by the District. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the NL&S Manager at Cooper Nuclear Station of any questions regarding this document or any associated regulatory commitments.

COMMITMENT	COMMITTED DATE OR OUTAGE
Fires in Board C and Vertical Board F in the control room were identified as completely disabling the control of the switchyard breakers. The licensee indicated that they were examining additional (unspecified) features that would allow for control of the switchyard breakers either from the switchyard itself or from an alternate area, or having a preplanned recovery /repair action in place.	Evaluation completed – No additional action to be taken.
A fire in the SW pump house could disable all the pumps and one of the motor-driven fire water system pumps, especially if the fire suppression system fails. The licensee stated that it was examining the feasibility of providing the SW System with water supplies that are diverse from the pumps in the SW pump room.	Evaluation completed – No additional action to be taken.
The diesel generator exhaust system is unprotected from postulated tornado generated missiles. The licensee is expected to address the resolution of this issue in the future as part of the IPEEE Issue Resolution Plan for CNS.	Modification completed – No additional action to be taken.