



WISCONSIN PUBLIC SERVICE CORPORATION

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August 30, 1991

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

Docket 50-305
Operating License DPR-43
Kewaunee Nuclear Power Plant
Re-examination of Indications in the A Steam Generator Upper Shell-to-Cone Weld

- References:
- 1) Letter from J. G. Giitter (US NRC) to D. C. Hintz (WPSC) dated January 31, 1989
 - 2) Letter from J. G. Giitter (US NRC) to D. C. Hintz (WPSC) dated April 8, 1988 (SER)
 - 3) Letter from K. H. Evers (WPSC) to U.S. NRC dated May 23, 1991
 - 4) 1980 Edition Thru Winter 1981 Addenda of Section XI, ASME Boiler and Pressure Vessel Code.

This letter is in response to the Nuclear Regulatory Commission (NRC) staff review of indications, in the A steam generator (S/G) upper shell-to-cone weld, that were initially detected in 1988 during a routine Section XI ultrasonic examination (reference 1). The NRC Safety Evaluation Report (reference 2) documenting your review of these indications required that Wisconsin Public Service Corporation (WPSC) re-examine the indications during the next three inspection periods and confirm that the indications are actually embedded rather than surface connected. The NRC staff also requested that WPSC review the results from the first 40-month

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Document Control Desk
August 30, 1991
Page 2

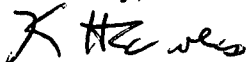
re-examination with the NRC. Reference 3 transmitted a summary of the results of the first 40-month re-examination, which was conducted during the 1991 refueling outage. The NRC staff has subsequently requested additional information to aid in review of the 1991 inspection results. In response to that request, this letter transmits a detailed report of the first 40-month re-examination results: WCAP-11476 Rev. 3 titled, "Handbook on Flaw Evaluation, Kewaunee Unit 1 Steam Generators, Upper Shell to Cone Weld."

WCAP-11476 provides documented evidence that all of the indications detected during the 1988 and 1991 examinations are within the acceptance limits specified in Table IWB-3511-1 of Section XI (reference 4). The actual size (2a value described in Subsection IWA-3300(a)(2) of Section XI) of the indications were on the order of 0.10 inches. Furthermore, there is no evidence that the indications originate from or extend to the weld inside diameter surface. Appendix C of the WCAP fully documents the results of the 1991 re-examinations and further supports WPSC's request for NRC approval to revert back to the original inspection schedule as allowed in paragraph IWC-2420(c) of Section XI.

In closing, WPSC is pleased to transmit WCAP 11476 Rev. 3 and trusts that this report provides the additional information needed to complete the NRC staff review. However, as stated in reference 3, WPSC is amenable to a formal presentation of these results at your facilities, should you desire.

Should you have any questions or comments, please contact a member of my staff.

Sincerely,



K. H. Evers
Manager - Nuclear Power

CAT/jms

Attach.

cc - US NRC - Region III - w/o attach.
Mr. Patrick Castleman, US NRC - w/o attach.

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