



Commonwealth Edison  
1400 Opus Place  
Downers Grove, Illinois 60515

January 28, 1995

U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attn: Document Control Desk

Subject: Technical Report Regarding  
Application for Increase in  
Interim Plugging Criteria for  
Byron and Braidwood Unit 1  
NRC Docket Numbers 50-454 and 50-456

- References:
1. Teleconference between the Nuclear Regulatory Commission and the Commonwealth Edison Company dated January 26, 1995, regarding Interim Plugging Criteria for Braidwood Unit 1 Steam Generator Tubes
  2. D. Lynch letter to D. Farrar dated January 24, 1995, transmitting Information Regarding the Review of WCAP-14222, "Braidwood Unit 1 and Byron Unit 1, Model D4 Steam Generator Limited Tube Support Plate Displacement Analysis in Support of Interim Plugging Criteria"
  3. D. Saccomando letter to NRC dated November 14, 1994, transmitting WCAP-14222, "Braidwood Unit 1 and Byron Unit 1 Model D4 Steam Generator Limited Tube Support Plate Displacement Analysis in Support of Interim Plugging Criteria"

The Reference teleconference between the Nuclear Regulatory Commission (NRC) and Commonwealth Edison Company (ComEd) discussed the submittal of information regarding a proposed Technical Specification Amendment for Braidwood Station Unit 1 which would allow for an increase in the Interim Plugging Criteria (IPC) for Steam Generator tubing. During that conversation it was agreed that ComEd would submit a Technical Report which outlines our justification that an increase in the IPC value is technically warranted. This report would be reviewed by the Staff and a subsequent meeting between the Staff and ComEd would be held to further discuss the report. This technical report is provided in the Attachment.

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Information contained in this Technical Report justifies an increase in the IPC for hot leg tube intersections with ODSCC from 1.0 volt to 3.0 volts. While the current 1.0 volt IPC criteria is partially based on a structural limit derived from freespan tube burst conditions, the 3.0 volt IPC criteria is based on the constraining effects of the TSP to reduce burst probability to negligible levels. ComEd proposes to accomplish this by limiting the TSP motion during postulated steam line break events. Selected hot leg tubes will be hydraulically expanded to serve as anchors to limit tube support plate motion during a postulated steam line break event. With TSP motion limited, the length of a crack confined within the TSP that would be subjected to freespan conditions due to TSP movement would be greatly reduced, thus reducing tube burst probabilities during accident conditions.

ComEd requests that the Staff review the following Attachments:

Preliminary Report, "Technical Support For Alternate Plugging Criteria With Tube Expansion at Tube Support Plate Intersections for Model D4 Steam Generators (Proprietary)." This Preliminary Reprt is intended to be a stand alone document. Portions of the information contained in the Preliminary Report are contained in WCAP-14222, which was previously transmitted in Reference 3. ComEd would like to note that the expected differences between the Preliminary Report and the finalize version of the WCAP will be indicated on the Table of Content page of the Preliminary Report. Additionally, the Preliminary Report contains Braidwood specific data, Byron specific data will be contained in the final WCAP.

"Probability of Detection Versus Voltage Correlation" which was prepared under EPRI project number 6424/RP-3580. This report provides justification that a higher than the currently accepted probability of detection of 0.6 is appropriate for use at Braidwood and Byron Stations. Submitting this report is consistent with Section 2.b.1 of the Draft Generic Letter which states that, "POD should be assumed to have a value of 0.6, or as an alternative, an NRC approved POD function can be used if such a function becomes available."

Also included is a table which details where responses to questions which were transmitted by the Staff in Reference 2 can be located.

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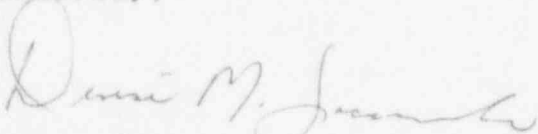
Please note that the Preliminary Report "Technical Support For Alternate Plugging Criteria With Tube Expansion at Tube Support Plate Intersections for Model D4 Steam Generators" contains information proprietary to the Westinghouse Electric Corporation as specified in the attached Westinghouse Letter NTD-NRC-95-4396 dated January 27, 1995. This letter defines how the Westinghouse Electric Corporation will comply with Title 10, Code of Federal Regulations, Part 2, Section 790 (10CFR2.790). Accordingly, it is requested that the information which is proprietary to Westinghouse be withheld from public disclosure.

Correspondence with respect to the proprietary aspects of the item listed above or the supporting Westinghouse Letter NTD-NRC-95-4396 should be addressed to N.J. Liparulo, Manager of Nuclear Safety & Regulatory Activities, Westinghouse Electric Corporation, P.O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

ComEd would like to emphasize to the Staff the importance of conducting an expeditious review of these documents. These documents will be used as a basis in upcoming Technical Specification submittals for Byron and Braidwood Stations. ComEd looks forward to meeting with the Staff to further continue conversation concerning increasing the IPC value.

If you have any questions regarding this please address them to this office.

Sincerely,



Denise M. Saccomando  
Nuclear Licensing Administrator

Attachment

cc: R. Assa, Braidwood Project Manager-NRR  
M. Lynch, Senior Project Manager-NRR  
G. Dick, Byron Project Manager-NRR  
S. DuPont, Senior Resident Inspector- Braidwood  
H. Peterson, Senior Resident Inspector-Byron  
J. Martin, Regional Administrator-RIII  
Office of Nuclear Safety-IDNS