

WISCONSIN PUBLIC SERVICE CORPORATION



P.O. Box 1200, Green Bay, Wisconsin 54305

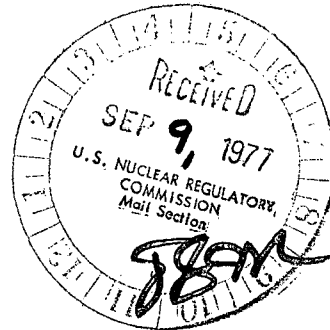
September 6, 1977

Regulatory

File Cy.

Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

ATTN: Mr. A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors



Gentlemen:

SUBJECT: Docket 50-305
Operating License DPR-43
Steam Generator Tube Plugging Criteria

- REF:
- a) Letter to NRC from WPS dated November 15, 1976
 - b) WCAP-7832, "Evaluation of Steam Generator Tube, Tube Sheet and Divider Plate Under Combined LOCA Plus SSE Conditions"
 - c) Kewaunee Nuclear Power Plant Annual Operating Report - 1976

Proposed Amendment No. 19, Proposed Change No. 21, to the Kewaunee Nuclear Power Plant Technical Specifications, submitted by reference a), has been questioned regarding the use of 50% tube wall penetration as the steam generator tube plugging criteria. The purpose of this letter is to further justify our use of the 50% tube plugging criteria.

In the Atomic Safety and Licensing Appeal Board hearing decision for Prairie Island Nuclear Generating Plant, Units 1 and 2, (ALAB-343, September 2, 1976), Section III-D, "Tube Plugging Criteria," acceptance of the applicant's justification for applying reference b) to 51-series steam generators is indicated. Further testimony outlined in this decision provided information that a 51-series tube thinned to 0.021 inches (58% tube degradation) is equivalent in strength to the degraded Model D tube described in reference b) and will meet the Faulted Condition Stress Criteria. This information indicates that a 50% tube plugging criteria provides complete assurance against tube failure in the absence of significant tube wall thinning due to corrosion.

Wisconsin Public Service Corporation agrees with the NRC's usage of a 40% wall penetration tube plugging criteria when significant corrosive tube thinning is occurring in the steam generator. Such a limit is needed in this case to provide assurance that tube degradation in excess of 50% does not occur between inservice inspections of the steam generator. However, since there is

772520033

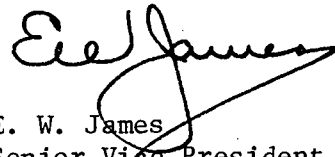
U. S. Nuclear Regulatory Commission

Page 2

September 6, 1977

no evidence of tube thinning in the Kewaunee Plant Steam Generators, as reported in reference c), we believe our use of a 50% wall penetration tube plugging criteria is justified. If significant corrosive tube thinning does ever occur in the Kewaunee Plant Steam Generators, we will follow the 40% penetration tube plugging criteria and will request a Technical Specification amendment to this effect.

Sincerely,



E. W. James
Senior Vice President
Power Supply & Engineering

EWJ:sna

RECEIVED DOCUMENT
PROCESSING UNIT

1977 SEP 9 PM 12 07