

NOV 8 1973

Wisconsin Public Service Corporation
ATTN: E. W. James, Senior Vice-President
Power Generation & Engineering
P. O. Box 1200
Green Bay, Wisconsin 54305

Docket No. 50-305

Gentlemen:

Thank you for your letter dated October 31, 1973, which forwarded a report pursuant to 10 CFR 50.55(e). Your report will be reviewed and evaluated and, should we require additional information concerning this matter, we will contact you.

Your cooperation concerning this matter is appreciated.

Sincerely,

JG
John G. Davis, Deputy Director
for Field Operations
Directorate of Regulatory Operations

bcc: PDR
LPDR
TIC
NSIC
RO Files
DR Central Files
RO:III, N.C.Moseley, w/o encl

OFFICE	RO:FS/EB	RO:FS/EB,C	RO:DD/FO			
SURNAME	SEBryan:ds	HD [Signature]	JG Davis			
DATE	11/7/73	11-7-73	11/7			

FS&EB ACTION CONTROL FORM

A. Action Code CDR#195
Name of Licensee and Facility Wisconsin Public Service Corp. (Kewaunee)
Docket No. or License No. 50-305
Title CDR Evaluation and Followup
Origin CDR Date Rec'd 11/5/73

B. FS&EB Branch Coordinator:
Bryan X Dreher _____
Ellis _____ Paulus _____
Completion Requested by _____

C. Action Requested of:
ADREMP _____ M&PPOB _____ EPB _____ RPB _____ ADCO _____
OB _____ CB _____ TAB _____ OOE _____ Region III
Date Requested 11/7/73 Completion Requested by Routine Handling
Reference Letter E. W. James to D. F. Knuth dated 10/31/73.

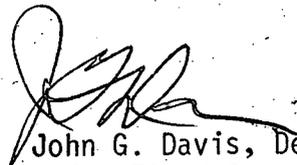
D. Action Requested

In accordance with PI 0600/6, "Construction Deficiency Reporting," the Wisconsin Public Service Corporation (Kewaunee) covering pipe restraint welds without non-destructive examination, 10/31/73, is being assigned to RO:III for evaluation of the technical adequacy of the corrective action and the final resolution of the deficiency.

E. Date Action Completed _____

Close-out (Date & Method) _____

Comments: If completion date is not consistent with your work schedule, please let us know.



John G. Davis, Deputy Director
for Field Operations
Directorate of Regulatory Operations

Handwritten:
JGD
11-7-73

WISCONSIN PUBLIC SERVICE CORPORATION



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

October 31, 1973

Dr. D. F. Knuth, Director
Directorate of Regulatory Operations
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Dr. Knuth:

Subject: Docket No. 50-305
Kewaunee Nuclear Power Plant
Pipe Restraint Welds

In compliance with AEC Regulation 10 CFR 50.55(e), we submit the following:

Introduction

This letter is a final report and follows up our verbal response of October 4, 1973, describing certain pipe restraint welds made without non-destructive examination as required by the applicable welding specifications. Corrective action has been taken to assure that all restraint welds are in accordance with approved procedures including appropriate inspection. The inspection demonstrated that all weld metal was sound, but that some welded joints exhibited insufficient penetration. A load analysis of the restraints having less than full penetration welds showed that stresses did not exceed code allowable values.

Description of Deficiency

An audit of the QC Records by Kewaunee Site Personnel revealed that certain restraint welds had been made without non-destructive examination. Approximately 130 restraints required MT examination and 30 restraints required UT examination.

Corrective Action

A non-destructive weld examination procedure was developed and all welds in question which were 1/2" or larger were UT inspected and welds less than 1/2" were MT inspected. The specification used for inspection and weld repair was in accordance with applicable AWS structural codes. All weld metal was found to be good but some joints exhibited insufficient penetration. Where less than full penetration welds were detected, the weld was repaired by welding the back side, where accessible, or removing previous weld material to allow a full penetration weld. Full penetration welds exist on all restraints as called for on design drawings.

October 31, 1973

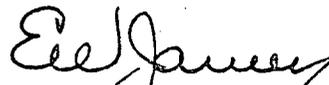
Analysis of Safety Implications

Some welds had insufficient penetration and for these cases the load carrying capability of the affected restraints was reviewed to determine if the structural integrity would have been jeopardized had the weld not been repaired.

The restraints were fabricated from a material with a specified minimum yield of 50,000 psi but the design was based on a material with a specified minimum yield of 36,000 psi. Actual weld material had a specified minimum yield of 60,000 psi.

Since the design assumed the weld material yield strength to be 36,000 psi, a substantial margin exists between the actual load carrying capability of a full penetration weld joint and the lower design load value. Even though some welds exhibited insufficient penetration, the margin was sufficient in all cases so as not to jeopardize structural capability of any restraint under design load conditions. However, the welds were made to attain full penetration, thereby maintaining the original design margins.

Very truly yours,



E. W. James, Senior Vice-President
Power Generation & Engineering

EWJ:sna

cc - Mr. James G. Keppler, Region III