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FROM: Wisconsin Public Svc. Green Bay, Wis. 54305 Mr. E.W. James		DATE OF DOC 11-14-74	DATE REC'D 11-18-74	LTR X	TWX	RPT	OTHER
TO: E. Case		ORIG 3 signed	CC	OTHER	SENT AEC PDR XXX		SENT LOCAL PDR XXX
CLASS	UNCLASS XXX	PROP INFO	INPUT	NO CYS REC'D 40	DOCKET NO: 50-305		
DESCRIPTION: Ltr notarized 11-15-74...trans the following.				ENCLOSURES: Revised Amdt #4 to the Tech Specs.... concerning requirements for the in-service inspection of steam generator tubes....			
PLANT NAME: Kewaunee				ACKNOWLEDGED (40 cys encl rec'd)			

FOR ACTION/INFORMATION

11-18-74 JB

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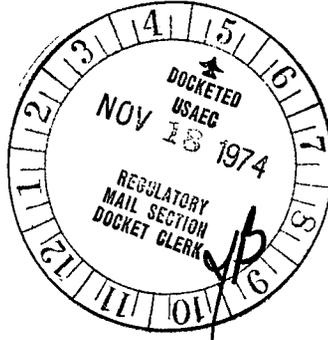


P.O. Box 1200, Green Bay, Wisconsin 54305

November 14, 1974

Regulatory Docket File

Mr. Edson Case, Acting Director
Directorate of Licensing
Office of Regulation
U. S. Atomic Energy Commission
Washington, D. C. 20545



Dear Mr. Case:

Subject: Amendment No. 4 (Revised) to Operating License DPR-43
Kewaunee Nuclear Power Plant
Docket 50-305

We submit herewith, thirty-seven (37) copies of Amendment No. 4 (Revised) to the Technical Specifications - Operating License DPR-43.

This submittal consists of minor revisions to our submittal of September 30, resulting from conversations between your Mr. L. McDonough and our Mr. M. Stern. The revisions provide clarification to the understanding of the requirements for in-service inspection of steam generator tubes as outlined in Regulatory Guide 1.83.

In order to maintain the proper record of Amendments and Changes, we have retained the same Amendment and Change number and have indicated a revised date on each applicable sheet.

Sincerely,

E. W. James (handwritten signature)

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

EWJ:sna

Subscribed and Sworn to
Before Me This 15TH Day
of NOVEMBER 1974

Notary Public, State of Wisconsin (handwritten signature)

My Commission Expires
FEBRUARY 16, 1975

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4.2.6 Inservice inspection shall be performed on steam generator tubes as follows:

- a. During each inservice inspection (at frequencies specified in Specification 4.2.7), a representative sample of at least 3 percent of the total number of steam generator tubes shall be eddy current inspected.

The tubes selected for each inservice inspection shall include:

1. All tubes (except plugged tubes) in which wall penetrations of >20 percent were revealed during previous inspections.
 2. A representative sample of tubes in those areas (including the cold-leg side) where design and experience have indicated potential problems.
- b. The minimum required 3% of the tubes shall be inspected over the full length to at least the top of the "U" bend.
 - c. Tubes having shown previous penetrations of >20% shall be inspected at least to the elevations of known degradation.
 - d. If the sum of all tubes which indicate:
 1. A discovery of 20% penetration during this inspection, or,
 2. An increase of 5% in penetration since the last inspection on tubes previously indicating >20% penetration,exceeds 10% of the tubes inspected or a tube requiring plugging is discovered, an additional 3 percent of the steam generator tubes shall be inspected per Specification 4.2.6.a. The additional 3% of tubes to be inspected shall be concentrated about the area or areas where degradation or defects were determined.

4.2.7 Inspection Frequencies - The above inservice inspections of steam tubes shall be performed at the following frequencies:

- a. At intervals of not less than 12 or more than 20 calendar months, except the first scheduled inservice inspection shall be performed at the first extended outage after 6 months of operation. If two consecutive inservice inspections of steam generator tubes show no additional tubes with wall penetrations >20 percent and no significant (>5 percent) further penetration of tubes with previous defect indications, the inspection frequency for hot-leg tubes may be extended to at least once per 40 months. If two consecutive inservice inspections of the cold-leg tubes of the steam generator show no additional tubes with wall penetrations >20 percent and no significant (>5 percent) further penetration of tubes with previous defect indications, the inspection frequency for cold-leg tubes may be extended to at least once per 10 years.
- b. During the shutdown subsequent to any of the following conditions:
 1. Primary-to-secondary leakage in excess of the limits specified in TS 3.1.d.
 2. A seismic occurrence greater than the Operating Basis Earthquake.
 3. A loss-of-coolant accident requiring actuation of the engineered safeguards.
 4. A major steam line or feedwater line break requiring an extended reactor shutdown.

4.2.8 Acceptance Criteria

- a. Any tubes with an eddy current indication of 50% or greater wall penetration shall be plugged before the steam generator is returned to service.

- b. If in the inspections performed under specification 4.2.6a, less than 10% of the total tubes inspected have detectable wall penetration (>20%) and no tubes require plugging per Acceptance Criteria 4.2.8a, plant operation shall be resumed and the inspection results shall be reported in the annual operating reports covering the periods of operation in which these inspections were completed.
- c. If in the inspections performed under specification 4.2.6d, less than 10% of the total tubes inspected have detectable wall penetrations (>20%) and no more than 3 tubes require plugging per Acceptance Criteria 4.2.8a, plant operation shall be resumed after corrective action is taken. The results of these inspections and corrective actions shall be reported in the annual operating reports covering the periods of operation in which these inspections were completed.
- d. If in the inspections performed under specification 4.2.6d, more than 10% of the total tubes inspected have detectable wall penetrations (>20%), or more than 3 of the tubes inspected require plugging, the situation will be assessed by the plant operator and appropriate action will be taken prior to plant operation. The event shall be immediately reported to the Commission for resolution and approval of the proposed remedial action.

Basis

The inspection program will be in accordance with the requirements of Section XI of ASME Code 1971 Edition and Summer and Winter 1971 addenda. The Examination requirements will be met to the extent practical through limitations on component configuration, accessibility and material composition.

The extent to which systems will be subject to the examination requirements of Table IS-251 have been determined in accordance with the criteria of IS-120. The exclusion criteria of IS-121 have been applied to determine which parts of systems or components are subject to surface or volumetric examinations and which parts are subject to a visual examination for evidence of leakage during the system hydrostatic test. A description of the system boundaries, delineating those parts subject to volumetric examination, those parts subject to surface examination and those parts requiring visual inspection during hydro are given in the notes to FSAR Table 4.4-2, titled Tables 4.4-2A, 4.4-2B and 4.4-2C.

The plant was not specifically designed to meet the requirements of Section XI of the code; therefore 100 percent compliance may not be feasible or practical. However, access for in-service inspection was considered during the design, and modifications have been made where practical to make provision for maximum access within the limits of the current plant design.

The Reactor Coolant System shall initially be free of gross defects, and the system has been designed such that gross faults or defects should not occur throughout the plant lifetime. The ten-year surveillance program will reveal possible fault areas before any leakage develops, should such problems actually occur.

The steam generator tube inspection program meets the requirements of AEC Regulatory Guide 1.83, "Inservice Inspection of Pressurized Water Reactor Steam Generator Tubes".

Inspections subsequent to the first two inservice inspections of the steam generator tubes shall routinely concentrate on the hot leg side of the steam generator.

Any tubes which indicate an eddy current determined wall thickness less than the minimum required thickness to sustain a LOCA in combination with a safe shutdown earthquake plus the average interval degradation thickness shall be plugged prior to returning the steam generator to service. Until this value is determined, the acceptance criteria of 4.2.8a shall apply.

TS 4.2-7

Amendment 4
Change No. 6
September 30, 1974
Revised 11/8/74

TABLE TS 4.2-1 (Page 9 of 14)

IN-SERVICE INSPECTION

SECTION C - STEAM GENERATOR (Continued)

IS-261 Item	Category	Component	Method of Examination	Extent and Frequency	Remarks
3.4	G-1	Pressure Retaining Bolting	None		There are no items in this category.
3.5	G-2	Manway Bolting	Visual	The Examinations Performed Over the 10 Year Interval Shall Cumulatively Cover All the Bolts	The pressure retaining bolting on the steam generator reactor coolant manway will be inspected in accordance with Section XI of ASME Code.
3.6	H	Integrally-Welded Vessel Supports	None		Steam generator supports are integrally cast with the channel head and consequently are excluded from examination under this category.
3.7	J-2	Cladding	Visual	One Patch Inside Each Manway will be Examined at the End of the 10 Year Interval	Vessel cladding within the manway extension is accessible for visual examination when the manway cover is removed.
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<u>REGENERATIVE HEAT EXCHANGER</u>					
3.1	B	Tube-Side Shell Welds	Visual U.T.	5 Percent of Each Weld is to be Cumulatively Examined Over the 10 Year Interval	
<u>EXCESS LETDOWN HEAT EXCHANGER</u>					
3.1	B	Shell Welds	Visual During Hydro	Vessel Examined for Evidence of Leakage During Hydro at the End of 10 Year Interval	
3.5	G-2	Tubesheet Bolting	Visual During Hydro		

Amendment 4
Change No. 6
September 30, 1974
Revised 11/8/74