



NRC-00-057

**Wisconsin Public Service Corporation**

(a subsidiary of WPS Resources Corporation)

Kewaunee Nuclear Power Plant

North 490, Highway 42

Kewaunee, WI 54216-9511

920-388-2560

July 25, 2000

10 CFR 50.90

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

Ladies/Gentlemen:

Docket 50-305  
Operating License DPR-43  
Kewaunee Nuclear Power Plant

**SUBJECT: ISSUANCE OF LICENSE AMENDMENT NO. 148 REGARDING STEAM  
GENERATOR SLEEVED TUBES AT KEWAUNEE. (TAC NO. MA3949)**

References: 1) Letter from Tae Kim (NRC) to M.L. Marchi (WPSC) dated June 27, 2000  
2) Letter from Tae Kim (NRC) to M.L. Marchi (WPSC) dated March 15, 2000

The purpose of this letter is to correct an administrative error that occurred in the process of requesting/issuing Kewaunee Nuclear Power Plant's (KNPPs) License Amendment number 148.

In October of 1998 KNPP submitted a request for a license amendment to revise the plugging limit for Westinghouse mechanical hybrid expansion joint (HEJ) sleeves and for the Westinghouse laser welded sleeves (LWS). When this license amendment was issued (reference 1) a previous license amendment, 146 (reference 2) was not included. License amendment 146, in part, extended the use of HEJ length based pressure boundary definition (L Criteria) Technical Specification (TS) for operating cycle 24.

During the NRC's review/approval process for amendment 148 KNPP submitted a request to extend the L Criteria TS through operating cycle 24. This request was necessary due to delays in the steam generator replacement project. These delays changed the steam generator replacement outage from the 2000 outage to the 2001 outage. On March 15, 2000 the L Criteria TS extension request was approved to include KNPP operating cycles 23 and 24 only, KNPP Amendment 146.

TS Amendment 148 requested changes to pages that were included in TS Amendment 146. When TS amendment 148 was issued the approval to extend the use of L Criteria for cycle 24 was inadvertently omitted.

ADD1

Document Control Desk

July 25, 2000

Page 2

KNPP requests that License Amendment 148 be reissued incorporating the extension of the L Criteria for cycle 24. Attached are the revised TS pages. No safety analysis is included as the safety analysis and safety evaluation associated with License Amendments 146 and 148 are still applicable.

Please contact Mr. Gerald Riste (920-388-8424) of my staff should you have any other questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mark L. Marchi" followed by a stylized flourish.

Mark L. Marchi  
Vice President-Nuclear

GOR

Attach.

cc - US NRC Region III  
US NRC Senior Resident Inspector

ATTACHMENT 1

Letter from Mark L. Marchi (WPSC)

To

Document Control Desk (NRC)

Dated

July 25, 2000

**Kewaunee Nuclear Power Plant  
License Amendment 148  
Pages TS 4.2-7 and TS 4.2-8**

2. A seismic occurrence greater than the Operating Basis Earthquake, or
  3. A loss-of-coolant accident requiring actuation of the engineering safeguards, where the cooldown rate of the Reactor Coolant System exceeded 100°F/hr, or
  4. A main steam line or feedwater line break, where the cooldown rate of the Reactor Coolant System exceeded 100°F/hr.
- d. If the type of steam generator chemistry treatment is changed significantly, the steam generators shall be inspected at the next outage of sufficient duration following 3 months of power operation since the change.

4. Plugging Limit Criteria

The following criteria apply independently to tube and sleeve wall degradation except as specified in TS 4.2.b.5 for the tube support plate intersections for which voltage-based plugging criteria are applied or for degradation except as specified in TS 4.2.b.6 for tubesheet crevice region in which the F\* and EF\* criteria is applied.

- a. Any tube which, upon inspection, exhibits tube wall degradation of 50% or more shall be plugged or repaired prior to returning the steam generator to service. If significant general tube thinning occurs, this criterion will be reduced to 40% wall degradation. Tube repair shall be in accordance with the methods described in the following:

WCAP-14685, Revision 4, "Laser Welded Repair of Hybrid Expansion Joint Sleeves for Kewaunee Nuclear Power Plant;"

WCAP-14685, Revision 2, Addendum 1, "Laser Welded Repair of Hybrid Expansion Joint Sleeves for Kewaunee Nuclear Power Plant Addendum 1: Evaluation of Weld Repaired HEJ Sleeved Tubes;"

WCAP-11643, "Kewaunee Steam Generator Sleeving Report (Mechanical Sleeves);"

CEN-629-P Revision 2, "Repair of Westinghouse Series 44 and 51 Steam Generator Tubes Using Leak Tight Sleeves;"

CEN-632-P Revision 0, "Repair of Kewaunee Steam Generator Tubes Using a Resleeving Technique;" or

WCAP-13088, Revision 3, "Westinghouse Series 44 and 51 Steam Generator Generic Sleeving Report" including Addendum 1 to Revision 4.

- b. Any Westinghouse mechanical hybrid expansion joint (HEJ) sleeve which, upon inspection, exhibits wall degradation of 23% or more shall be plugged or repaired prior to returning the steam generator to service. Figure TS 4.2-1 depicts a Westinghouse HEJ sleeve.
- c. For disposition of parent tube indications in the upper joint of Westinghouse HEJ sleeved tubes,\* as depicted in Figure TS 4.2-1, the following requirements will apply:
  - 1. HEJ sleeved tubes shall be inspected with a non-destructive examination technique capable of locating the bottom of the hardroll upper transition. HEJ sleeved tubes with circumferential parent tube indications located  $\geq 0.92$  inch (plus an allowance for NDE uncertainty) below the bottom of the hardroll upper transition, as measured on the inside of the sleeve, may remain in service.
  - 2. HEJ sleeved tubes with circumferential parent tube indications located  $< 0.92$  inch (plus an allowance for NDE uncertainty) from the bottom of the hardroll upper transition, as measured on the inside of the sleeve, shall be plugged or repaired prior to returning the steam generator to service.
  - 3. HEJ sleeved tubes with axial parent tube indications located in the parent tube pressure boundary, as depicted in Figure TS 4.2-1, shall be plugged or repaired prior to returning the steam generator to service.
- d. Any Combustion Engineering leak tight sleeve which, upon inspection, exhibits wall degradation shall be plugged prior to returning the steam generator to service. This plugging limit applies to the sleeve up to and including the weld region.
- e. Any Westinghouse laser welded sleeve which, upon inspection, exhibits wall degradation of 23% or more, shall be plugged prior to returning the steam generator to service. This plugging limit applies to the sleeve up to and including the weld.

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\*TS 4.2.b.4.c is applicable for operating cycles 23 and 24 only.