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Kewaunee / Point Beach Nuclear  
Operated by Nuclear Management Company, LLC

NRC-02-109

December 19, 2002

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  
License Amendment Request 192 To The Kewaunee Nuclear Power Plant Technical Specifications,  
"Changes to Steam Generator Inspection Reporting Criteria."

Pursuant to 10 CFR 50.90, the Nuclear Management Company (NMC) is submitting this Licensing Amendment Request (LAR) to the Kewaunee Nuclear Power Plant (KNPP) Technical Specifications (TS). The proposed amendment would revise the reporting requirements for the discovery of defective or degraded steam generator tubes. On October 25, 2000, the Nuclear Regulatory Commission (NRC) amended its event reporting requirements for nuclear power reactors to reduce or eliminate the unnecessary reporting burden associated with events of little or no safety significance. This LAR is to align KNPP's Technical Specifications to the change in 10 CFR 50.72 and 10 CFR 50.73 reporting requirements.

Because this change is an administrative change, NMC concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c). Also, as these changes are consistent with currently approved staff positions (10 CFR 50.72 and 10 CFR 50.73) they were evaluated using traditional engineering analyses. NMC is not submitting risk information in support of the proposed changes.

Attachment 1 to this letter contains a description, proposed change, background, and regulatory analysis for the proposed changes. Attachment 2 contains the strike-out Technical Specification pages TS 4.2-5 and TS 4.2-6. Attachment 3 contains the affected Technical Specification pages as revised. Attachment 4 contains TS basis page TS B4.2-3. Attachment 5 contains the affected TS basis page as revised. NMC makes no commitments associated with this submittal.

A001

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If you have any questions or require additional information, please contact Mr. Gerald Riste at (920) 388-8424.

I declare under penalty that the foregoing is true and correct.  
Executed on December 19, 2002.



Thomas Coutu  
Site Vice President  
Kewaunee Nuclear Power Plant

GOR

Attachments

1. Safety Analysis
2. Technical Specification Strike-out Pages
3. Technical Specification Affected Pages
4. Technical Specification Strike-out Basis Page
5. Technical Specification Affected Basis Page

cc - US NRC, Region III  
US NRC Senior Resident Inspector  
Electric Division, PSCW

**ATTACHMENT 1**

**Letter from Thomas Coutu (NMC)**

**To**

**Document Control Desk (NRC)**

**Dated**

**December 19, 2002**

**License Amendment Request 192**

**SAFETY ANALYSIS**

**Description**

**Proposed Changes**

**Background**

**Regulatory Analysis**

**Environmental Consideration**

**References**

## 1.0 DESCRIPTION

This letter is a request to amend Operating License DPR-43 for the Kewaunee Nuclear Power Plant. The proposed changes will revise the Operating License to incorporate changes made to Title 10 of the Code of Federal Regulation (CFR) section 50, items 72 and 73 (10 CFR 50.72 and 10 CFR 50.73). On October 25, 2000, the Nuclear Regulatory Commission (NRC) amended its event reporting requirements for nuclear power reactors to reduce or eliminate the unnecessary reporting burden associated with events of little or no safety significance.<sup>(1)</sup> This license amendment request (LAR) aligns Kewaunee Nuclear Power Plant's (KNPP) Technical Specifications (TS) to the change in 10 CFR 50.72 and 10 CFR 50.73 reporting requirements.

Current KNPP TS 4.2.b.7.c states:

If a steam generator tube inspection result falls into Category C-3, the Commission shall be promptly (within 4 hours) notified according to requirements of 10 CFR 50.72(b)(2)(i). A Licensee Event Report shall then be filed with the Commission as described by Specification 4.2.b.7.a and as set forth in 10 CFR 50.73(a)(2)(ii).

Current KNPP TS 4.2.b.7.a states:

Following each in-service inspection of steam generator tubes during which tubes are plugged, the number of tubes plugged shall be reported to the Commission within 30 days.

As part of the change associated with 10 CFR 50.72 and § 50.73, the NRC changed its requirements for notification under the circumstances described in the TSs above. This LAR is to align KNPP TS with the current 10 CFR 50 requirements.

## 2.0 PROPOSED CHANGES

NMC is proposing the following changes to the KNPP TS to align KNPP TS with the current 10 CFR 50.72 and 10 CFR 50.73 reporting requirements:

1. TS 4.2.b.7.a Change KNPP TS to state the report is due within 60 days.
2. TS 4.2.b.7.c Change KNPP TS to state that notification is due in according with the requirements of 10 CFR 50.72(b)(3)(ii).

### 3.0 BACKGROUND

KNPP's original TS only allowed for plugging of steam generator tubes and required the NRC to be notified within 15 days following each inservice inspection of the steam generator tubes if their were any tubes requiring plugging. With increased tube degradation Wisconsin Public Service Corporation (WPSC) requested a change to KNPP TS to allow repairing the steam generator tubes in conjunction with plugging.<sup>(2)(3)</sup> This proposed amendment requested to change the reporting time frame from 15 days to 30 days and added item "c" requiring a 4-hour NRC notification and follow-up report for inspection results that fell into the "C-3" category (TS 4.2.b.7.c). This request was approved by the NRC as KNPP TS Amendment 73.<sup>(4)</sup>

The bases for these report periods were 10 CFR 50.72 and 10 CFR 50.73. This is demonstrated by the direct correlation in the TS themselves and by the NRC Safety Evaluation attached to their approval letter for TS Amendment 73. The NRC safety evaluation stated that changing the report date to 30 days will develop consistency between this reporting requirement and the reporting requirements of 10 CFR 50.73.

Therefore, these reporting requirements are linked to the reporting requirements of 10 CFR 50.72 and 10 CFR 50.73. As the 10 CFR reporting requirements have changed this request is to change the KNPP TS reporting requirements to match the 10 CFR requirements.

### 4.0 REGULATORY SAFETY ANALYSIS

#### No Significant Hazards Consideration

The proposed changes will revise the Operating License to incorporate changes made to Title 10 of the Code of Federal Regulation (CFR) section 50 items 72 and 73 (10 CFR 50.72 and 10 CFR 50.73). On October 25, 2000, the Nuclear Regulatory Commission (NRC) amended its event reporting requirements for nuclear power reactors to reduce or eliminate the unnecessary reporting burden associated with events of little or no safety significance. This license amendment request (LAR) aligns Kewaunee Nuclear Power Plants (KNPP) Technical Specifications (TS) for reporting defects in the steam generator tubes to the changes in 10 CFR 50.72 and 10 CFR 50.73 reporting requirements.

Nuclear Management Company, LLC. (NMC) has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed changes do not have any effect on structures, systems, and components (SSCs) of the Kewaunee Nuclear Power Plant. The changes do not affect plant operations, any design function or an analysis that verifies the capability of an SSC to perform a design function. The changes do not change any of the previously evaluated accidents in the updated safety analysis report (USAR). As these changes are administrative, there is no increase in the probability and consequences of analyzed accidents.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed changes are administrative and do not change the design function or operation of any plant SSCs. The proposed changes do not create the possibility of a new or different kind of accident due to credible new failure mechanisms, malfunctions, or accident initiators not considered in the design and licensing bases.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

The proposed changes modify NRC reporting requirements only. The changes do not exceed or alter a design basis or safety limit or significantly reduce the margin of safety.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

Based on the above, NMC concludes that the proposed amendment present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c). Accordingly, a finding of "no significant hazards consideration" is justified.

Based on the considerations discussed above: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

## 5.0 ENVIRONMENTAL CONSIDERATION

The proposed amendment is confined to (i) changes to surety, insurance, and/or indemnity requirements, or (ii) changes to record keeping, reporting, or administrative procedures or requirements. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

## 6.0 REFERENCES

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- (1) Federal Register / Vol. 65, No. 207 / Wednesday, October 25, 2000 / Rules and Regulations, pages 63769 - 63789
  - (2) Letter from Carl W. Giesler (WPSC) to Dr. Harold R. Denton (NRC), "Proposed Amendment No. 70, Steam Generator Tube Repair," dated October 23, 1985.
  - (3) Letter from D.C. Hintz (WPSC) to Document Control Desk (NRC), "Proposed Amendment No. 70a, Steam Generator Tube Repair," dated January 30, 1987.
  - (4) Letter from Morton B. Fairtile (NRC) to D.C. Hintz (WPSC) dated April 1, 1987.

**ATTACHMENT 2**

**Letter from Thomas Coutu (NMC)**

**To**

**Document Control Desk (NRC)**

**Dated**

**December 19, 2002**

**License Amendment Request 192**

**Strike-Out TS Pages:**

**TS 4.2-5**

**TS 4.2-6**



c. Additional, unscheduled in-service inspections of each steam generator shall be performed using the criteria set forth in Table 4.2-2 for a "1<sup>st</sup> SAMPLE INSPECTION" during shutdowns consequent to:

1. Primary-to-secondary tube leaks (not including leaks originating from tube-to-tubesheet welds) in excess of the limits of TS 3.1.d and TS 3.4.d, or
2. A seismic event having a magnitude greater than the Operating Basis Earthquake, or
3. A loss-of-coolant accident requiring actuation of engineered safeguards, where the Reactor Coolant System cooldown rate exceeded 100°F/hr, or
4. A main steam line or feedwater line break, where the Reactor Coolant System cooldown rate exceeded 100°F/hr.

d. If there is a significant change in steam generator chemistry control methodology, the steam generators shall be operated at power for three months while using the new treatment and shall then be inspected during the next outage of sufficient duration.

4. Plugging Limit Criteria

Any tube with tube wall degradation of 50% or more shall be plugged before returning the steam generator to service. If significant general tube thinning occurs, this criterion is reduced to 40% wall degradation.

5. Deleted

6. Deleted

7. Reports

a. Following each in-service inspection of steam generator tubes during which tubes are plugged, the number of tubes plugged shall be reported to the Commission within ~~3060~~ days.

- b. The results of each steam generator tube in-service inspection shall be included in the Annual Operating Report for the reporting period that included completion of the inspection. The report shall include:
1. Number of tubes inspected and extent of inspection.
  2. Location of each tube wall degradation and its percent of wall penetration.
  3. Identification of tubes plugged.
- c. If a steam generator tube inspection result falls into Category C-3, the Commission shall be promptly ~~(within 4 hours)~~ notified according to requirements of 10 CFR 50.72(b)(23)(ij). A Licensee Event Report shall then be filed with the Commission as described by Specification 4.2.b.7.a and as set forth in 10 CFR 50.73(a)(2)(ii).

**ATTACHMENT 3**

**Letter from Thomas Coutu (NMC)**

**To**

**Document Control Desk (NRC)**

**Dated**

**December 19, 2002**

**License Amendment Request 192**

**Affected TS Pages:**

**TS 4.2-5**

**TS 4.2-6**

c. Additional, unscheduled in-service inspections of each steam generator shall be performed using the criteria set forth in Table 4.2-2 for a "1<sup>st</sup> SAMPLE INSPECTION" during shutdowns consequent to:

1. Primary-to-secondary tube leaks (not including leaks originating from tube-to-tubesheet welds) in excess of the limits of TS 3.1.d and TS 3.4.d, or
2. A seismic event having a magnitude greater than the Operating Basis Earthquake, or
3. A loss-of-coolant accident requiring actuation of engineered safeguards, where the Reactor Coolant System cooldown rate exceeded 100°F/hr, or
4. A main steam line or feedwater line break, where the Reactor Coolant System cooldown rate exceeded 100°F/hr.

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4. Plugging Limit Criteria

Any tube with tube wall degradation of 50% or more shall be plugged before returning the steam generator to service. If significant general tube thinning occurs, this criterion is reduced to 40% wall degradation.

5. Deleted

6. Deleted

7. Reports

a. Following each in-service inspection of steam generator tubes during which tubes are plugged, the number of tubes plugged shall be reported to the Commission within 60 days.

- b. The results of each steam generator tube in-service inspection shall be included in the Annual Operating Report for the reporting period that included completion of the inspection. The report shall include:
1. Number of tubes inspected and extent of inspection.
  2. Location of each tube wall degradation and its percent of wall penetration.
  3. Identification of tubes plugged.
- c. If a steam generator tube inspection result falls into Category C-3, the Commission shall be promptly notified according to requirements of 10 CFR 50.72(b)(3)(ii). A Licensee Event Report shall then be filed with the Commission as described by Specification 4.2.b.7.a and as set forth in 10 CFR 50.73(a)(2)(ii).

**ATTACHMENT 4**

**Letter from Thomas Coutu (NMC)**

**To**

**Document Control Desk (NRC)**

**Dated**

**December 19, 2002**

**License Amendment Request 192**

**Strike-Out TS Basis Page:**

**TS B4.2-3**

**Technical Specification 4.2.b.4**

Procedures, calculations, and analyses found in WCAP-15325,<sup>(1)</sup> combined with conservative allowances, such as general corrosion and measurement error, are the bases for the tube plugging criteria set forth in TS 4.2.b.4. Tubes that exceed the limits established by these criteria must be removed from service by plugging.

Steam generator tube plugging is a common method of preventing excessive primary-to-secondary steam generator tube leakage. This method is relatively uncomplicated and isolates a defective tube from the reactor coolant system by installing mechanical devices to block its hot and cold leg tubesheet openings.

**Technical Specification 4.2.b.5 (Deleted)**

**Technical Specification 4.2.b.6 (Deleted)**

**Technical Specification 4.2.b.7**

Category C-3 inspection results are considered abnormal degradation to a principal safety barrier and are therefore reportable under 10 CFR 50.72(b)(23)(ii) and 10 CFR 50.73(a)(2)(ii).

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<sup>(1)</sup> WCAP 15325, "Regulatory Guide 1.121 Analysis for the Kewaunee Replacement Steam Generators."

**ATTACHMENT 5**

**Letter from Thomas Coutu (NMC)**

**To**

**Document Control Desk (NRC)**

**Dated**

**December 19, 2002**

**License Amendment Request 192**

**Affected TS Basis Page:**

**TS B4.2-3**



**Technical Specification 4.2.b.4**

Procedures, calculations, and analyses found in WCAP-15325,<sup>(1)</sup> combined with conservative allowances, such as general corrosion and measurement error, are the bases for the tube plugging criteria set forth in TS 4.2.b.4. Tubes that exceed the limits established by these criteria must be removed from service by plugging.

Steam generator tube plugging is a common method of preventing excessive primary-to-secondary steam generator tube leakage. This method is relatively uncomplicated and isolates a defective tube from the reactor coolant system by installing mechanical devices to block its hot and cold leg tubesheet openings.

**Technical Specification 4.2.b.5 (Deleted)**

**Technical Specification 4.2.b.6 (Deleted)**

**Technical Specification 4.2.b.7**

Category C-3 inspection results are considered abnormal degradation to a principal safety barrier and are therefore reportable under 10 CFR 50.72(b)(3)(ii) and 10 CFR 50.73(a)(2)(ii).

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<sup>(1)</sup> WCAP 15325, "Regulatory Guide 1.121 Analysis for the Kewaunee Replacement Steam Generators."