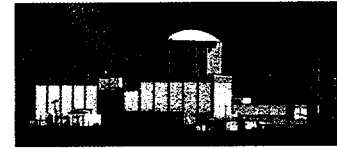




Kewaunee Nuclear Power Plant
N490, State Highway 42
Kewaunee, WI 54216-9511
920-388-2560



Operated by
Nuclear Management Company, LLC

August 17, 2001

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
RESPONSE TO NUCLEAR REGULATORY COMMISSION REQUEST FOR ADDITIONAL
INFORMATION REGARDING PROPOSED AMENDMENT 177 TO REMOVE STEAM
GENERATOR ALTERNATE REPAIR CRITERIA FROM KEWAUNEE NUCLEAR POWER
PLANT TECHNICAL SPECIFICATION 4.2

References: 1) NRC Letter from John G. Lamb to Mark Reddemann, "KEWAUNEE
NUCLEAR POWER PLANT – REQUEST FOR ADDITIONAL
INFORMATION RELATED TO PROPOSED AMENDMENT 177 TO
KEWAUNEE NUCLEAR POWER PLANT TECHNICAL
SPECIFICATIONS (TAC NO. MB2047)," dated August 8, 2001

Attached is the Nuclear Management Company, LLC, (NMC) response to a Nuclear Regulatory
Commission (NRC) Request for Additional Information (RAI) (Reference 1) about the NMC
application for permission to amend Technical Specification 4.2. This amendment would
remove alternate steam generator tube repair criteria that are inapplicable to replacement steam
generators. Nothing in this response represents a commitment not previously made in separate
correspondence.

If there are questions regarding this response, please contact either Mr. Thomas J. Webb at
(920) 388-8537 or me at (920) 755-7627.

Sincerely,

Mark E. Reddemann
Site Vice President

MTVN

Attachments: 1. Response to NRC Request for Additional Information On Kewaunee
Nuclear Power Plant Technical Specification 4.2 ASME Code Class In-
Service Inspection and Testing

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

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ATTACHMENT 1

Letter from Mark Reddemann (NMC)

To

Document Control Desk (NRC)

Dated

August 17, 2001

Response to NRC Request for Additional Information

On

Proposed Amendment 177 to

Kewaunee Nuclear Power Plant Technical Specification 4.2,

ASME Code Class In-Service Inspection and Testing

REQUEST FOR ADDITIONAL INFORMATION REGARDING
PROPOSED AMENDMENT 177 TO KEWAUNEE NUCLEAR POWER PLANT
TECHNICAL SPECIFICATIONS FOR STEAM GENERATOR ALTERNAT REPAIR
CRITERIA
(TAC NO. MB2047)

Note:

Nuclear Regulatory Commission (NRC) requests are shown in italics. Nuclear Management Company, LLC (NMC) responses follow in plain text.

Each of the two NRC requests contain two parts, each of which require a separate response. The four discreet parts are represented individually below, with their respective responses.

NRC REQUEST 1, Part 1:

Please provide a summary of preservice inspection scope and results for the replacement steam generators (RSGs).

NMC RESPONSE TO REQUEST 1, Part 1:

NMC conducted the preservice examination of Replacement Steam Generator (RSG) tubes in January 2001, following arrival of the RSGs at KNPP. Siemens performed data acquisition and primary analysis, and Zetec performed third party data analysis. Preservice inspection scope included bobbin-coil examination of the full length of each tube in each steam generator. Where bobbin-coil examination returned indications, those indications were re-examined using RPC probes. Below are the tabulated results and associated discussions.

INDICATION TYPE	SG-1		SG-2	
	QUANTITY	TUBES	QUANTITY	TUBES
BLG	2	2	0	0
BMG	3	3	6	6
DNG	18	16	10	8
FSD	1	1	0	0
MBM	3	3	2	2
TOTALS	27	25	18	16

SG-1

Preservice inspection of SG-1 revealed 27 total indications located in 25 tubes. Each indication received supplemental testing using the rotating +Point probe. Supplemental testing confirmed that none of these indications were degraded. Following are the indications found:

Bulge (BLG) - Defined as a tube diameter that is greater than nominal. Inspection revealed two (2) BLG indications located in two (2) tubes. Both are located at the top surface of the tubesheet. These BLG indications did not appear in the tube-mill eddy-current data and were likely initiated during RSG fabrication.

Bending Machine Geometry (BMG) – Defined as a dent-like indication at the apex of a u-bend. Inspection revealed three (3) BMG indications in three (3) tubes, two (2) of which were in row-9 u-bends and one (1) in a row-16 u-bend. The tube-bending manufacturing step is the likely source of BMG indications. These BMG indications were all present in the tube-mill eddy-current data.

Ding (DNG) - Defined as tube diameter less than nominal. Inspection revealed 18 DNG indications located in 16 tubes. The reporting threshold was 2 volts, and the largest indication was 4.66 volts. DNG indications are concentrated at the upper TSP elevation. These DNG indications were not present in the tube-mill eddy-current data, and were likely initiated during RSG fabrication.

Free-Span Differential (FSD) - Defined as a free-span indication reported on a differential channel. Inspection revealed one (1) FSD indication in one (1) tube. This indication was present in the tube-mill data.

Manufacturing Burnish Marks (MBM) – Defined as a material discontinuity at a location which has been repaired in the tube mill by buffing. Inspection revealed three (3) MBM indications in three (3) tubes. All of these MBM indications were present in the tube-mill eddy-current data.

Preservice examination of SG-1 resulted in no tubes being plugged or repaired.

SG-2

Preservice inspection of SG-2 revealed 18 total indications located in 16 tubes. Each indication received supplemental testing using the rotating +Point probe. Supplemental testing confirmed that none of these indications were degraded. Following are the indications found:

Bending Machine Geometry (BMG) – Inspection revealed six (6) BMG indications in six (6) tubes. There were two (2) BMG found in row-5 u-bends, one (1) found in a row-7 u-bend, one (1) found in a row-11 u-bend, one (1) found in a row-16 u-bend, and one (1) found in a row-22 u-bend. The tube-bending manufacturing step is the likely source of BMG indications. These BMG indications were all present in the tube-mill eddy-current data.

Ding (DNG) – Inspection revealed 10 DNG indications in eight (8) tubes. The reporting threshold was 2 volts, and the largest indication was 5.71 volts. DNG indications in SG-2 are concentrated at the upper TSP elevation. The DNG indications were not present in tube-mill eddy-current data, so they were likely initiated during RSG fabrication.

Manufacturing Burnish Marks (MBM) – Inspection revealed two (2) MBM indications in two (2) tubes. These MBM indications were all present in the tube-mill eddy-current data.

Preservice examination of SG-2 resulted in no tubes being plugged or repaired.

NRC REQUEST 1, Part 2:

Please indicate if any RSG inspections have been performed in the top of tubesheet region and in low row U-bends.

NMC RESPONSE TO REQUEST 1, Part 2:

The NMC preservice inspection of RSGs performed bobbin-coil examinations in these regions, with supplemental +Point testing of indications revealed by bobbin-coil.

NRC REQUEST 2, Part 1:

Please provide the scope of the first planned in-service inspection after RSGs have been installed.

NMC RESPONSE TO REQUEST 2, Part 1:

NMC intends to conduct the first ISI of the RSGs in the spring of 2003. The scope of this inspection is a bobbin-coil examination of the full-length of every tube (100%). Where bobbin-coil examination returns indications, those indications will be re-examined using RPC probes.

In 2002, NMC will perform a degradation assessment that will take into consideration industry experience with similar steam generators. Results of this degradation assessment will determine the final scope of RPC testing during the 2003 ISI. NMC will most likely perform a 100% RPC inspection of row-1 u-bends during the first ISI and a minimum 33% top-of-tubesheet (hot leg) inspection. However, we have not yet finalized these plans.

NRC REQUEST 2, Part 2:

If Electric Power Research Institute (EPRI) examination Guidelines are followed, please list if there are any exceptions taken to the EPRI Guidelines.

NMC RESPONSE TO REQUEST 2, Part 2:

In the spring 2000, KNPP performed an ISI on the original steam generators (OSG). During this ISI, we took only one exception to Revision 5 of the EPRI examination guidelines. This exception was for volumetric examinations of installed tube plugs. NMC currently has no intent to take exception to EPRI Guidelines during ISI of the RSGs.