August 5, 2004

NRC-04-090
10 CFR 50.90

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

KEWAUNEE NUCLEAR POWER PLANT
DOCKET 50-305
LICENSE No. DPR-43

Response To Request For Additional Information Related To Relief Request RR-MC-2

References:

1. Letter from Thomas Coutu (NMC) to Document Control Deck (NRC), "IN-SERVICE INSPECTION (ISI) PROGRAM RELIEF REQUEST NO. RR-MC-2 FOR CLASS MC", dated January 16, 2004.

2. E-mail from Carl F. Lyon (NRC) to Theodore L. Maloney - "REQUEST FOR ADDITIONAL INFORMATION KEWAUNEE NUCLEAR POWER PLANT RELIEF REQUEST RR-MC-2 FIRST TEN YEAR CONTAINMENT INSERVICE INSPECTION", dated June 15, 2004.

In reference 2, the Nuclear Regulatory Commission (NRC) staff requested additional information concerning the Nuclear Management Company, LLC (NMC) request for an Inservice Inspection Program relief request number RR-MC-2. (Reference 1). This letter is NMC's response to the NRC's request for additional information (RAI).

Enclosure 1 to this letter contains the questions the NRC staff requested. Enclosure 2 to this letter contains the questions the NRC staff requested with NMC's response.

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I declare under penalty of perjury that the foregoing is true and correct.
Executed on August 5, 2004.

Thomas Coutu
Site Vice-President, Kewaunee Nuclear Power Plant
Nuclear Management Company, LLC

Enclosures(2)

cc : Administrator, Region III, USNRC
Project Manager, Kewaunee Nuclear Power Plant, USNRC
Senior Resident Inspector, Kewaunee Nuclear Power Plant, USNRC
Electric Division, PSCW

ENCLOSURE 1
NRC REQUEST FOR ADDITIONAL INFORMATION
REGARDING RELIEF REQUEST RR-MC-2

REQUEST FOR ADDITIONAL INFORMATION
KEWAUNEE NUCLEAR POWER PLANT
RELIEF REQUEST RR-MC-2
FIRST TEN YEAR CONTAINMENT INSERVICE INSPECTION

Reference: Letter from Thomas Coutu (NMC) to NRC, "Inservice Inspection Program Relief Request No. RR-MC-2 for Class MC," January 16, 2004.

1. For the performance of leakage rate tests, the licensee is using performance based Option B of Appendix J of 10 CFR Part 50. Based on the performance of the individual components (except equipment hatches and air-locks), the licensee is permitted to extend the Type B leakage rate test interval to as high as 10 years. Such a test interval may not be adequate to ensure the integrity of the associated seals and gaskets.

   Please provide the (1) Type B leak rate test interval for the three affected components; and (2) justification that the test interval is adequate for the assessment of the integrity of the seals and gaskets associated with these components.

2. In the "Alternative Method of Examination," the licensee states that it will perform VT-3 examination of the seals and gaskets of these components, if the components are disassembled for maintenance.

   Since this is the only opportunity available to monitor the aging degradation of the seals and gaskets, please justify why a VT-3 examination is proposed when a component is disassembled, instead of a more detailed VT-1.

ENCLOSURE 2
NRC RAI RESPONSE REGARDING RR-MC-2
KEWAUNEE NUCLEAR POWER PLANT

REQUEST FOR ADDITIONAL INFORMATION
KEWAUNEE NUCLEAR POWER PLANT
RELIEF REQUEST RR-MC-2
FIRST TEN YEAR CONTAINMENT INSERVICE INSPECTION

Reference: Letter from Thomas Coutu (NMC) to NRC, "Inservice Inspection Program Relief Request No. RR-MC-2 for Class MC," January 16, 2004.

1. For the performance of leakage rate tests, the licensee is using performance based Option B of Appendix J of 10 CFR Part 50. Based on the performance of the individual components (except equipment hatches and air-locks), the licensee is permitted to extend the Type B leakage rate test interval to as high as 10 years. Such a test interval may not be adequate to ensure the integrity of the associated seals and gaskets.

   Please provide the (1) Type B leak rate test interval for the three affected components; and (2) justification that the test interval is adequate for the assessment of the integrity of the seals and gaskets associated with these components.

NMC Response

Kewaunee Nuclear Power Plant has implemented a Containment Leak Rate Test Program that includes an allowance for a Type B or Type C test interval to be extended up to 60 months. With an eighteen-month operating cycle this becomes a nominal actual allowed test interval extension of 54 months (4.5 years.) This allowance of 10 CFR 50, Appendix J, Option B was first exercised during the 2001 refueling outage. In some cases the initial test interval extension is less than three refueling outages due to balancing of the overall test schedule.

The Type B Tests at Kewaunee Nuclear Power Plant have been performed as follows since the start of the 1st Ten Year Interval September 9, 1996 through September 9, 2006 for Class MC for the requested penetrations.

- Penetration No. C-10: Performed refueling outages 1998, 2000 and 2003 and is scheduled to be performed every third refueling outage, subsequently (next performance in 2007.)

- Penetration No. F-8: Performed during refueling outages 1998, 2000 and 2001 and is scheduled to be performed in 2004 and then every third refueling outage, subsequently.

- Penetration No. 41 S/S: Performed during refueling outages 1998, 2000, 2001 and 2003 and scheduled to be performed in 2004. Due to other commitments made by the Pumps & Valves IST Program, this penetration is tested each refueling outage.

The extended test intervals are deemed adequate because the methodology used to determine if the Type B or Type C test interval for a particular component can be extended is established in the Containment Leak Rate Test Program. This methodology was approved for use by the NRC in Regulatory Guide 1.163, Performance-Based Containment Leak-Test Program, by reference to NEI 94-01, Industry Guideline For Implementing Performance-Based Option of 10 CFR 50, Appendix J. The plant-specific Containment Leak Rate Test Program incorporates the Regulatory Guide 1.163 position that a Type C test interval extension is limited to 60 months and conservatively applies this 60-month limitation to both Type C and Type B tests. As described in NEI 94-01, the justification for the acceptability of extending the test interval for a component is based upon an evaluation of the following performance factors: Past Component Performance, Design, Service, and Safety Impact. KNPP data for these three penetrations has shown acceptable local leak rate test results for every test conducted since 1998. These test results exceed the NEI 94-01 acceptability criteria for justification of the ten year interval.

2. In the "Alternative Method of Examination," the licensee states that it will perform VT-3 examination of the seals and gaskets of these components, if the components are disassembled for maintenance.

   Since this is the only opportunity available to monitor the aging degradation of the seals and gaskets, please justify why a VT-3 examination is proposed when a component is disassembled, instead of a more detailed VT-1.

NMC Response

VT-3 Examination was the Alternative Method of Examination, if disassembled for Maintenance, due to requirements stated in ASME Boiler and Pressure Vessel Code Section XI 1992 Edition 1992 Addenda Article IWE-2500 Table IWE-2500-1 Category E-D Item No. E5.10 and E5.20. Performance of a VT-1 Visual Examination could be performed but would be in excess of ASME Boiler and Pressure Vessel Code Section XI 1992 Edition 1992 Addenda stated requirements.

Even though a VT-1 Visual Examination would be in excess of ASME Boiler and Pressure Vessel Code Section XI 1992 Edition 1992 Addenda, NMC will conduct a VT-1 examination of the seals and gaskets of these components, if the components are disassembled for maintenance, for the life of this relief request.