

NRC-03-035

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Kewaunee Nuclear Power Plant

Operated by Nuclear Management Company, LLC 10 CFR 50.90

March 21, 2003

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 REGARDING LICENSE AMENDMENT REQUEST 187 TO THE KEWAUNEE NUCLEAR POWER PLANT TECHNICAL SPECIFICATIONS (TAC NO. MB5718)

References: Letter from Thomas Coutu (NMC) to Document Control Desk (NRC), "NMC Responses To NRC Request for Additional Information Concerning License Amendment Request 187 to the Kewaunee Nuclear Power Plant Technical Specifications (TAC NO. MB5718)," dated February 27, 2003.

The Nuclear Management Company, LLC, (NMC) submitted a response to the Nuclear Regulatory Commission (NRC) request for additional information (RAI) concerning License Amendment Request (LAR) 187 (reference 1) to the Kewaunee Nuclear Power Plant (KNPP) Technical Specifications (TS) revising KNPP TS to allow transitioning to Westinghouse 422V+ nuclear fuel.

Based on review of the response NMC submitted, the NRC developed another question regarding our Rod Ejection Analysis. Attachment 1 is the NRC question and the NMC response to the Rod Ejection question.

If there are any comments or questions concerning this request please contact Mr. Gerald Riste, of my staff, at (920) 388-8424.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 21, 2003.

Aces for

Thomas Coutu Site Vice-President, Kewaunee Plant

GOR

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

Attachment 1-RAI Question Regarding NMC Rod Ejection Analysis

ATTACHMENT 1

NUCLEAR MANAGEMENT COMPANY, LLC KEWAUNEE NUCLEAR PLANT DOCKET 50-305

March 21, 2003

Letter from Thomas Coutu (NMC)

То

Document Control Desk (NRC)

Response to Request for Additional Information

RAI Question Regarding NMC Rod Ejection Analysis

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Additional RAI for RCCA Ejection: "KNPP is crediting a generic Westinghouse analysis (WCAP-7588) for the RCS pressure and number of rods in DNB calculations. I wanted to know how the licensee verified that this generic case is bounding for a KNPP RCCA ejection accident considering the conditions representative of the fuel upgrade and power uprate programs. Also, is crediting this generic analysis consistent with the current KNPP methodology?"

<u>NMC Response</u>: The determination of the applicability and boundedness of the generic WCAP-7588 RCCA ejection analyses, for the maximum RCS pressure and maximum number of rods in DNB criteria, is based on a comparison of KNPP RCCA ejection design inputs and the very conservative WCAP-7588 RCCA ejection analysis inputs. The KNPP design inputs considered are applicable to a KNPP-specific analysis at the uprated power conditions for mixed FANP/WEC fuel cores and equilibrium cores.

Parameters that were compared include: power level, initial pressurizer pressure, pressure relief capability, number of RCS loops, and key core and fuel parameters.

Based on the totality of this comparison, it is concluded that if an RCS pressure analysis and a DNB analysis are explicitly performed for Kewaunee, the peak calculated RCS pressure and percentage of rods in DNB are ensured to be less limiting than those evaluated in the generic analysis. Therefore, the KNPP results are bounded by the generic analysis.

The crediting of WCAP-7588 analyses is consistent with the existing licensing basis for the KNPP RCCA ejection analyses (Ref. Section 14.2.6, Pages 14.2-29 - 14.2.30, KNPP USAR, Rev. 17, 06/01/2002).