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June 9, 2003

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

KEWAUNEE NUCLEAR POWER PLANT
DOCKET 50-305
LICENSE No. DPR-43
KEWAUNEE NUCLEAR POWER PLANT – REVIEW OF DRAFT SAFETY EVALUATION FOR MEASUREMENT UNCERTAINTY RECAPTURE POWER UPRATE – NMC RESPONSE (TAC NO. MB7225)

Reference Letter from John G. Lamb (NRC) to Thomas Coutu (NMC), dated June 3, 2003, "Kewaunee Nuclear Power Plant – Review of Draft Safety Evaluation for Measurement Uncertainty Recapture Power Uprate (TAC NO. MB7225)."

On June 3, 2003, the Nuclear Regulatory Commission (NRC) transmitted the above reference letter to the Nuclear Management Company, LLC, (NMC). The NRC staff requested that NMC review the enclosed draft safety evaluation (SE) to verify that factual information was accurate and complete. Attached is NMC's response to the review request on the NRC's draft SE.

This letter contains no new commitments and no revisions to existing commitments.

Thomas Coutu
Site Vice-President, Kewaunee Plant

GOR

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

Attachment NMC's Response to NRC's Review Request of the Draft SE for KNPP MUR

A001

ATTACHMENT

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

(June 9, 2003)

Letter from Thomas Coutu (NMC)

To

Document Control Desk (NRC)

NMC's Response to NRC's Review Request of the Draft SE for KNPP MUR
(TAC NO. MB7225)

Comment #	Draft SE Page	Comment Description
1	4	Section 3.0, third paragraph, last sentence. AEC concluded that the KNPP design generally conforms to the intent of the GDC's. The words "intent of the" should be added prior to "GDC".
2	4	Section 3.1.1, refers to "these topical reports" when there is only one topical report. Should be singular.
3	4	Section 3.1.2.1 states that "there will be one electronics cabinet per feedwater loop." There is actually only one electronics cabinet receiving the data from both feedwater loops. An electronics cabinet is capable of receiving data for up to eight loops. Suggested change for the sentence, "There is a common UFMD electronics cabinet receiving UFM and UTM sensor data from each of the feedwater loops."
4	5	Section 3.1.2.2, first paragraph last sentence. Delete, "and is also used for the daily nuclear power range nuclear instrument calibration." The calorimetric calculation for the instrument calibration is performed separately and is not a part of the RTO program.
5	5	Section 3.1.2.2, paragraph following the table. The last sentence states, "...the need to lower RTP..." This should refer to RTO (reactor thermal output) rather than rated thermal power as rated power never changes since it is the licensed limit while RTO is the measured value.
6	7	Section 3.1.2.4, item (1), second sub-item (1), states that "plant operations at a core thermal output may continue. Recommend placing "up to rated power" between "output" and "may".
7	7	Section 3.1.2.4, item (1), second sub-item (2). The second of the last sentence implies that the relaxation of the Appendix K rule allows the UFM to operate with the RTDs. The relaxation of the Appendix K allows operation with reduced power measurement uncertainty but does not describe what must be used to achieve that reduced uncertainty. The way the statement reads it could be misinterpreted that Appendix K allows that combination of equipment. It should be clarified to state that the combination of the UFM and the RTDs results in a reduced measurement uncertainty of 0.8 percent. Operating with a reduced power measurement uncertainty of 0.8 percent, which is based on the relaxation of Appendix K, is the basis for operation at 1670 MWt.
8	8	Section 3.1.2.4, item (3), third paragraph states "Westinghouse Advanced Measurement and Analysis Group." Delete "Westinghouse" as AMAG is not part of Westinghouse but rather Westinghouse markets their product.

Comment #	Draft SE Page	Comment Description
9	8	Section 3.1.2.4, item (3), bottom of the page. WCAP-15591, revision 0 was submitted with the KNPP fuel transition, not with the COLR. Reference should be changed to the fuel transition. KNPP Fuel Transition to Westinghouse 422V+ fuel, Amendment 167 dated April 4, 2003.
10	11	Section 3.2.1, delete "LOCA" before MUR power level.
11	16	Section 3.2.2.2.10, first paragraph, second and third sentence is not accurate. KNPP is not capable of a full load rejection without a reactor trip. This was a change made during the fuel transition and explained in the RAI response submitted April 30, 2003. The loss of external electrical load accident analysis submitted with the fuel transition, and subsequently approved by letter on April 4, 2003, was for a full loss of load with a reactor trip.
12	16	Section 3.2.2.2.11; first paragraph, remove "SG power-operated relief valves." KNPP safety analysis does not credit the SG power-operated relief valves. Reference LAR 187, Fuel Transition RAI response, dated February 27, 2003, Attachment B, section 5.1.11.
13	21	Section 3.2.2.9, second paragraph, middle of paragraph, states that the NRC staff concluded the NMC adequately accounted for the effects of power uprate to 1673 MWt (regarding hydraulic design of the core). This power level should be 1772 MWt, not 1673 MWt.
14	25	Section 3.2.2.12, paragraph prior to table, year of teleconference should be 2003 not 2002.
15	25	Section 3.2.2.12, paragraph after table, last sentence. The potential areas of concern were not addressed in NMC's submittal for KNPP stretch power uprate dated May 22, 2003.
16	27	Section 3.3.2.1, first paragraph, last sentence, states that the normal containment doses were evaluated and found to be within the current EQ plan. The evaluation described in the January 13, 2003 submittal found that the normal containment doses were not within the current EQ plan. A commitment was made (commitment 4 of the January 13, 2003 submittal) to update the EQ plan to include the new containment exclusion areas. This statement in the draft SE needs to be changed. Recommended change is delete, "they were within the bound of the current EQ plan" and insert "the EQ plan was committed to be updated (commitment 4 of the January 13, 2003 submittal)".

Comment #	Draft SE Page	Comment Description
17	28	Section 3.3.2.2.3, second paragraph states the maximum design rating is 648 MVA for the main transformers. In Attachment 2, page 49 of the January 13, 2003 submittal the maximum equipment design is 649.6 MVA. The first paragraph correctly states the transformers' rating.
18	34	Section 3.4.2.5, first paragraph, states a code of record for the RCPs at KNPP. In the submittal text and in the KNPP USAR it clearly states that the RCPs at KNPP predate the inclusion of the pumps into ASME code and that the code is used for guidance only. Therefore, this should not be stated as the code of record for KNPP. Additionally, the reference to the code is incorrect. It should be the range of codes as described in Attachment 3, section 5.6 of the January 13, 2003, submittal.
19	36	Section 3.4.2.8, second paragraph, second sentence, states that "the licensee indicated that the NMC MOV program used the maximum design basis differential pressure (worst-case scenario) that are expected during the normal and emergency operation of MOVs." This was not stated in our submittal (refer to Attachment 2, page 42 of the January 13 submittal). Delete this portion of text, as it is not true. The rest of the paragraph is true.
20	36	Section 3.4.2.8, third paragraph, second sentence, the phrase "using the maximum design pressure" is not a true statement. Refer to the licensee's text regarding GL 95-07 in attachment 2, page 43 of the January 13, 2003 submittal. Delete this section of text as it is not true.
21	43	Section 3.8.2 first paragraph is a duplicate of section 3.7.2 first paragraph. Section 3.8.2 is associated with plant systems whereas section 3.7.2 is associated with human factors.