



Nebraska Public Power District

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NLS2005076
August 18, 2005

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Subject: Response to U. S. Nuclear Regulatory Commission Request for Additional Information Regarding License Amendment Request to Revise Technical Specifications – Single Loop Operation Safety Limit Minimum Critical Power Ratio (TAC No. MC6346)
Cooper Nuclear Station, Docket No. 50-298, DPR-46

- References:
1. Letter from M. C. Honcharik, U. S. Nuclear Regulatory Commission, to R. K. Edington, Nebraska Public Power District, dated June 24, 2005, "Cooper Nuclear Station – Request for Additional Information Re: License Amendment Request to Revise Technical Specifications – Single Loop Operation Safety Limit Minimum Critical Power Ratio (TAC No. MC6346)"
 2. Letter from S. B. Minahan, Nebraska Public Power District, to U. S. Nuclear Regulatory Commission dated March 8, 2005, "License Amendment Request to Revise Technical Specifications – Single Loop Operation Safety Limit Minimum Critical Power Ratio" (NLS2005017)

The purpose of this letter is to submit a response to Nuclear Regulatory Commission (NRC) Request for Additional Information (RAI) provided to the Nebraska Public Power District by Reference 1. The RAI was in support of the NRC review of the license amendment request submitted by Reference 2. The response to the RAI is provided as Attachment 1.

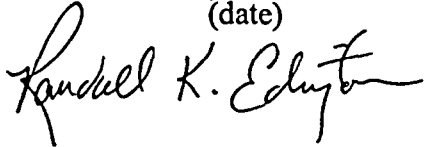
The additional information does not result in a need to revise the No Significant Hazards Consideration Determination submitted with Reference 2. The information provided in this RAI response is not proprietary to Global Nuclear Fuel – Americas.

Should you have questions or require additional information, please contact Paul Fleming, Licensing Manager, at (402) 825-2774.

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I declare under penalty of perjury that the foregoing is true and correct.

Executed on 8/18/2005
(date)



Randall K. Edington
Vice President – Nuclear and
Chief Nuclear Officer

/rr

Attachment

cc: Regional Administrator w/ attachment
USNRC - Region IV

Senior Project Manager w/ attachment
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector w/ attachment
USNRC

Nebraska Health and Human Services w/ attachment
Department of Regulation and Licensure

NPG Distribution w/o attachment

CNS Records w/ attachment

Attachment 1

Response to NRC Request for Additional Information Regarding License Amendment Request to Revise Technical Specifications Single Loop Operation Safety Limit Minimum Critical Power Ratio (TAC No. MC6346)

Cooper Nuclear Station NRC Docket No. 50-298, DPR-46

1. NRC Request

On Page 2 in Attachment 1, and on Page 4 of Enclosure 1 of your March 8, 2005 submittal, you state the reasons for the increase in your SLO SLMCPR as "The actual end of Cycle 22 exposure was 360 MWd/ST less than the licensing assumption and below the minimum exposure window specified in the reload licensing analysis." On Page 6 of Enclosure 1 in Table 1 you state that the "Cycle Exposure at Limiting Point (MWd/ST)" is 11000 for the RLP (Reference Loading Pattern – original reload licensing basis) and 11350 for the CMR (Cycle Management Report – reanalyzed results based on the actual end of Cycle 22 exposure). These values are in contradiction to your statement that the actual end of Cycle 22 exposure was 360 MWd/ST less than the licensing assumption. Please explain this discrepancy.

Nebraska Public Power District (NPPD) Response

The Reference Loading Pattern (RLP) Cycle 22 exposure condition is determined in advance of actual End of Cycle (EOC). Consequently it is based on a projected EOC condition defined by the assumed reload licensing exposure window. The Cycle Management Report (CMR) exposure is based on actual EOC exposure condition. For Cycle 22, the nominal reload licensing assumption for EOC exposure was 12,285 MWd/ST, whereas the actual EOC exposure was 11,924 MWd/ST. Thus the actual EOC exposure was 361 MWd/ST (rounded to 360 MWd/ST) less than the nominal reload licensing assumption. These parameters were not reflected in the submittal.

It should also be noted that the value of 360 MWd/ST discussed in the submittal as the difference in EOC exposure was identified to be for Cycle 22, whereas the values of 11,000 MWd/ST and 11,350 MWd/ST cited in the RAI were identified as Cycle 23 in Table 1 of Enclosure 1 in the submittal.

For the Cycle 23 Safety Limit Minimum Critical Power Ratio (SLMCPR) analysis, the RLP limiting cycle exposure point for the Maximum Exposure Load Line Limit Analysis (MELLA) condition (100% Power / 75% Flow) was 1,400 MWd/ST prior to the nominal end of rated exposure point of 12,400 MWd/ST (i.e., 11,000 MWd/ST). The corresponding CMR limiting cycle exposure point for this same MELLA condition was 1,400 MWd/ST prior to the CMR end of rated exposure point of 12,750 MWd/ST (i.e., 11,350 MWd/ST). There is no discrepancy. Both cases were run at 1,400 MWd/ST prior to the end of rated

exposure. The end of rated exposure increased from 12,400 MWd/ST in the RLP to 12,750 MWd/ST in the CMR due to the increased reactivity of the core attributed primarily to the reduced Cycle 22 exposure.

2. NRC Request

For Table 2a in Enclosure 1 of your submittal, indicate whether the values listed for Cycle 23 are Cycle Management Report (CMR) or Reference Loading Pattern (RLP) calculations. Are there any differences between the two?

NPPD Response

The values of uncertainties cited in Table 2a in Enclosure 1 could be considered as either from the RLP or the CMR since there were no differences between the uncertainties used for the RLP and the CMR calculations.

ATTACHMENT 3 LIST OF REGULATORY COMMITMENTS©

Correspondence Number: NLS2005076

The following table identifies those actions committed to by Nebraska Public Power District (NPPD) in this document. Any other actions discussed in the submittal represent intended or planned actions by NPPD. They are described for information only and are not regulatory commitments. Please notify the Licensing Manager at Cooper Nuclear Station of any questions regarding this document or any associated regulatory commitments.

COMMITMENT	COMMITMENT NUMBER	COMMITTED DATE OR OUTAGE
None	N. A.	N. A.