



Nebraska Public Power District

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NLS2015080

June 30, 2015

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

Subject: Response to Nuclear Regulatory Commission Request for Additional Information for Relief Requests RP-08, Comprehensive Pump Test Upper Limit, and RP-09, Variance Around the Reference Values, for Fifth Ten-Year Interval Pump and Valve Inservice Testing Program
Cooper Nuclear Station, Docket No. 50-298, DPR-46

- References:**
1. Email from Siva Lingam, U.S. Nuclear Regulatory Commission, to Jim Shaw, Nebraska Public Power District, dated June 2, 2015, "Cooper - Relief Request (RR) RP-08 Associated with Comprehensive Pump Test Upper Limit and RR RP-09 Regarding Variance Around the Reference Values for Fifth Ten-Year Interval Pump IST Program (TAC Nos. MF5919 and MF5920)"
 2. Letter from Oscar A. Limpias, Nebraska Public Power District, to the U.S. Nuclear Regulatory Commission, dated March 19, 2015, "Fifth Ten-Year Interval Pump and Valve Inservice Testing Program Relief Requests"

Dear Sir or Madam:

The purpose of this letter is for the Nebraska Public Power District to respond to the Nuclear Regulatory Commission's Requests for Additional Information (RAI) (Reference 1) related to the Cooper Nuclear Station Fifth Ten-Year Interval Inservice Testing Relief Requests RP-08, "Comprehensive Pump Test Upper Limit" and RP-09, "Variance Around the Reference Values" (Reference 2).

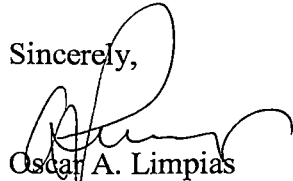
The response to the specific RAI questions is provided in the attachment to this letter.

This letter does not contain any new regulatory commitments.

If you have any questions concerning this matter, please contact Jim Shaw, Licensing Manager, at (402) 825-2788.

AD47
NRR

Sincerely,



Oscar A. Limpas
Vice President - Nuclear
and Chief Nuclear Officer

/dv

Attachment: Response to Nuclear Regulatory Commission Requests for Additional Information for Relief Requests RP-08, "Comprehensive Pump Test Upper Limit," and RP-09, "Variance Around the Reference Values," for Fifth Ten-Year Interval Pump and Valve Inservice Testing (IST) Program

cc: Regional Administrator w/ attachment
USNRC - Region IV

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

Senior Resident Inspector w/ attachment
USNRC - CNS

NPG Distribution w/o attachment

CNS Records w/ attachment

Attachment

Response to Nuclear Regulatory Commission Requests for Additional Information for Relief Requests RP-08, "Comprehensive Pump Test Upper Limit," and RP-09, "Variance Around the Reference Values," for Fifth Ten-Year Interval Pump and Valve Inservice Testing (IST) Program

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

The Nuclear Regulatory Commission (NRC) requests for additional information (RAI) regarding Relief Requests RP-08, "Comprehensive Pump Test Upper Limit" and RP-09, "Variance Around the Reference Values" are shown in italics. The Nebraska Public Power District (NPPD) response to the requests are shown in normal font.

RAI RP-08-01

Provide a list of pumps that this alternative request applies to. Include the pump name and number, the pump type, the American Society of Mechanical Engineers (ASME) Code class, the ASME Operation and Maintenance (OM) Code category (Group A or B), the design basis accident flow rate (indicate if not applicable), and the IST comprehensive pump test or Group A pump test flow rate that will be used to determine if a pump periodic verification test is required.

NPPD Response

Upon further review, Cooper Nuclear Station (CNS) will not pursue relief request RP-08 for all class 1, 2, and 3 IST pumps. The following table provides the list of pumps that RP-08 will be applicable to along with the requested information. The last column of the table also indicates which pumps will have a pump periodic verification (PPV) test based on the current design basis accident flow rate and the current comprehensive pump test flow rate. As is required by the 2012 ASME OM Code, Mandatory Appendix V, Section V-3000(e), the basis for the PPV test parameters will be documented by the owner.

Instrument inaccuracies associated with the PPV test parameters will be accounted for within the safety analyses and/or within the test acceptance criteria. CNS considers this a clarification to Mandatory Appendix V, Section V-3000(f), which states that the owner shall account for the pump periodic verification test instrument accuracies in the test acceptance criteria. Although not expected, any flow rate changes associated with this table would be available for NRC inspection, upon request.

RP-08 IST Class 1, 2, and 3 Applicable Pumps							
Pump Name	Pump Number	Pump Type	ASME Code Class	ASME OM Code Category	Design Basis Accident Flow Rate (gallons per minute)	IST Comprehensive Pump Test Flow Rate (gallons per minute)	PPV Test Required (Yes/No)
Reactor Equipment Cooling Pumps	REC-P-A/B/C/D	Horizontal centrifugal pump	3	Group A	416	1100	No
Residual Heat Removal Pumps	RHR-P-A/B/C/D	Vertical centrifugal pump	2	Group A	7700	7800	No
Service Water Pumps	SW-P-A/B/C/D	Vertical line shaft pump	3	Group A	5846	5500	Yes

RAI RP-08-02

Explain what is meant by the statement in Section 5 that says, "Therefore, any IST pump that is utilizing the 1.06 multiplier for the comprehensive pump test will meet this condition."

NPPD Response

This sentence is meant to be a concluding statement for the paragraph. For any pump that utilizes the 1.06 multiplier for the comprehensive pump test, a PPV test, if applicable, will also be required. However, a separate PPV test would not be applicable if the design basis accident flow rate does not exist or is bounded by the comprehensive pump test flow rate or Group A pump test flow rate.

RAI RP-09-01

Provide a list of pumps that this alternative request applies to. Include the pump name and number, the pump type, the ASME Code class, and the ASME OM Code category (Group A or B).

NPPD Response

The following table provides the list of pumps that RP-09 is applicable to along with the requested information.

RP-09 IST Class 1, 2, and 3 Applicable Pumps				
Pump Name	Pump Number	Pump Type	ASME Code Class	ASME OM Code Category
Core Spray Pumps	CS-P-A/B	Vertical centrifugal pump	2	Group B
High Pressure Coolant Injection Main & Booster Pumps	HPCI-P-MP HPCI-P-BP	Turbine driven horizontal centrifugal pump	2	Group B
Reactor Core Isolation Cooling Main Pump	RCIC-P-MP	Turbine driven horizontal centrifugal pump	2	Group B
Reactor Equipment Cooling Pumps	REC-P-A/B/C/D	Horizontal centrifugal pump	3	Group A
Residual Heat Removal Pumps	RHR-P-A/B/C/D	Vertical centrifugal pump	2	Group A
Service Water Pumps	SW-P-A/B/C/D	Vertical line shaft pump	3	Group A
Residual Heat Removal Service Water Booster Pumps	SW-P-BPA/B/C/D	Horizontal centrifugal pump	3	Group A