



**Nebraska Public Power District**

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NLS2012100  
September 17, 2012

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

Subject: Response to Request for Additional Information Regarding License Amendment Request for Implementing a 24-Month Fuel Cycle and Adoption of TSTF-493, Revision 4, Option A  
Cooper Nuclear Station, Docket No. 50-298, DPR-46

- References:
1. E-mail from Lynnea Wilkins, U.S. Nuclear Regulatory Commission, to Edward L. McCutchen, Nebraska Public Power District, dated September 6, 2012, "ME7169- Request for Additional Information RE: CNS 24 Month Fuel Cycle LAR - TS 5.5.2"
  2. Letter from Brian J. O'Grady, Nebraska Public Power District, to U.S. Nuclear Regulatory Commission, dated September 16, 2011, "License Amendment Request for Implementing a 24-Month Fuel Cycle and Adoption of TSTF-493, Revision 4, Option A" (NLS2011071)

Dear Sir or Madam:

The purpose of this letter is for the Nebraska Public Power District (NPPD) to respond to the Nuclear Regulatory Commission (NRC) Request for Additional Information (Reference 1) relating to the Cooper Nuclear Station (CNS) License Amendment Request for Implementing a 24-Month Fuel Cycle and Adoption of Technical Specification Task Force (TSTF) Traveler TSTF-493, Revision 4, Option A (Reference 2). The NPPD response is attached.

No commitments are made in this submittal. Should you have any questions concerning this matter, please contact Mike Boyce, CNS Strategic Initiatives Project Manager, at (402) 825-5100.

**COOPER NUCLEAR STATION**

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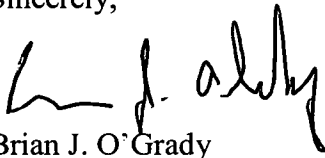
www.nppd.com

A001  
NRR

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

Executed on: 9/17/2012  
(Date)

Sincerely,



Brian J. O'Grady  
Vice President – Nuclear  
and Chief Nuclear Officer

BJO/wv

Attachment: Response to Request for Additional Information Regarding License Amendment  
Request for Implementing a 24-Month Fuel Cycle and Adoption of TSTF-493,  
Revision 4, Option A

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

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

NPG Distribution w/o Attachment

CNS Records w/Attachment

Attachment

Response to Request for Additional Information Regarding  
License Amendment Request for Implementing a 24-Month Fuel Cycle and  
Adoption of TSTF-493, Revision 4, Option A

The Nuclear Regulatory Commission (NRC) Request for Additional Information regarding the subject License Amendment Request is shown in italics. The Nebraska Public Power District's (NPPD) response to the request is shown in block font.

Question

*The NRC staff has a question regarding the statement, "The surveillance history review did not find any cases where the required integrated leak tests were not performed within the 18-month interval (including the 25% grace period)." It is the staff's understanding that the history review is intended to identify if there were any failures of the SR over the last 5 cycles or that would not have been otherwise detected by SR or routine plant activities (not if the tests have been faithfully performed per schedule, as stated). Please clarify the results of past SR performances, not just that they had been performed within required periodicity. Additionally, please clarify if your conclusion that the impact of the frequency change on safety is small based in large part on the fact that more frequent walkdowns of the system and contamination survey efforts should pick up on any developing leakage.*

TS 5.5.2. Systems Integrity Monitoring Program

*The program shall include the following:*

*b. Integrated leak test requirements for each system at 18 month intervals or less.*

*The test interval of this TS is being increased from once every 18 months to once every 24 months for a maximum interval of 30 months, including the 25% grace period afforded by TS SR 3.0.2.*

*This requirement establishes a program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. Specifically, the program requires an "Integrated leak test requirement for each system at 18 month intervals or less." The surveillance history review did not find any cases where the required integrated leak tests were not performed within the 18-month interval (including the 25% grace period). The change to 24-month operating cycles will increase the testing interval. This change to the testing requirement has been evaluated and determined that the impact, if any, on safety is small. This conclusion is based on the fact that most portions of the subject systems included in the program are visually*

*walked down, while the plant is operating, during plant testing and/or operator/system engineer walkdowns. In addition, housekeeping/safety walkdowns also serve to detect any gross leakage. If leakage is observed from these systems, corrective actions will be taken to repair the leakage. Finally, the plant radiological surveys will also identify any potential sources of leakage. Based on more frequent inspections previously described, and the ability to readily detect system leakage performance deficiencies, the impact of this change on safety, if any, is small.*

### Response

As described in the above excerpt, the Technical Specification (TS) 5.5.2 Systems Integrity Monitoring Program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The 18-month integrated leak test performed under this program does not meet the definition of a Surveillance Requirement, per 10 CFR 50.36(c)(3). It is more properly characterized as a TS-required programmatic inspection requirement. The inspection consists of walkdowns of certain portions of Emergency Core Cooling System (ECCS) during the performance of ECCS Surveillance Requirements (SR) (typically performed during each refueling outage), and noting leakage from such sources as pipe flanges, pump seals, and valve packing. The procedural acceptance criterion is that any ECCS leakage is recorded as a discrepancy, with walkdown results provided to the Core Cooling Engineering Supervisor for further review. Thus, the typical five cycle SR review criteria for Frequency extension is not strictly applicable. Notwithstanding, the CNS design/licensing basis maximum allowable ECCS leakage criteria is 3000 cc/minute. NPPD has established an administrative limit of 800 cc/min total ECCS leakage to provide margin to that design value. ECCS leakage has not exceeded the 800 cc/min limit since the adoption of this TS in 1998. In addition to the discussion in the License Amendment Request regarding the more frequent walkdowns and radiological surveys that are performed, this inspection history contributes to the conclusion that this change to the testing requirement will have a small impact.