February 26, 2010

LICENSEE: Nebraska Public Power District

FACILITY: Cooper Nuclear Station

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON JANUARY 14, 2010, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION STAFF AND NEBRASKA PUBLIC POWER DISTRICT, RELATED TO A CLARIFICATION FOR CERTAIN RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION FOR COOPER NUCLEAR STATION LICENSE RENEWAL

The U.S. Nuclear Regulatory Commission staff and representatives of Nebraska Public Power District (the applicant) held a telephone conference call on January 14, 2010, to discuss clarifications for certain responses to requests for additional information for Cooper Nuclear Station license renewal.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a brief description of the conference call.

The applicant had an opportunity to comment on this summary.

/RA/

Tam Tran, Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-298

Enclosures:
As stated

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DATE	02/16/10	02/22/10	02/16/10	02/18/10	02/26/10

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Memorandum to Nebraska Public Power District from Tam Tran dated February 26, 2010

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON JANUARY 14, 2010, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION STAFF AND NEBRASKA PUBLIC POWER DISTRICT, RELATED TO A CLARIFICATION FOR CERTAIN RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION FOR COOPER NUCLEAR STATION LICENSE RENEWAL

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LIST OF PARTICIPANTS
TELEPHONE CONFERENCE CALL
COOPER NUCLEAR STATION
LICENSE RENEWAL APPLICATION

January 14, 2010

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T. Ivy,	Entergy
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ENCLOSURE 1

COOPER NUCLEAR STATION
LICENSE RENEWAL APPLICATION
(Brief description of the conference call)

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Nebraska Public Power District (NPPD or the applicant), held a telephone conference call on January 14, 2010, to discuss clarifications for certain responses to requests for additional information (RAIs) listed below.

Clarification for RAI 2.3.4.2 CM-3 Response

The staff and the applicant discussed RAI 2.3.4.2 CM-3 and the applicant's letter of response (NLS2009095) regarding whether the Condensate Storage Tanks (CSTs) are in scope for license renewal. The staff reiterated that in modes 4 and 5, the Cooper Nuclear Station (CNS) Technical Specification requires the operability of two low pressure emergency core cooling system (ECCS) (safety-related system) during shutdown operations. The CST is allowed by the Technical Specifications to be a water source for this safety-related system in modes 4 and 5, and in situations when the suppression pool is unavailable. The Technical Specification Bases explains that the safety basis for this technical specification is to prevent fuel uncovery during a drain down event. Additionally, the CNS Updated Safety Analysis Report (USAR) credits CST inventory as an alternate means for filling the Spent Fuel Pool. Therefore, the CST has an (a)(2) function and should be included within the scope of license renewal.

The applicant maintained that the CST does not fulfill a function as defined under Title 10 of the *Code of Federal Regulations* Part 54.4(a)(1) (10 CFR 54.4 (a)(1)), (a)(2), or (a)(3); therefore, the CST should not be included in the scope of license renewal.

Subsequent to the conference call, the NRC staff requested a copy of the latest version of the CNS Fire Hazards Analysis. NPPD provided this to the NRC.

Clarification for RAI 2.4-2(c) Response

In RAI 2.4-2(c), the staff requested clarification on the exclusion of the Drywell coating from the scope of license renewal. In response to RAI 2.4-2(c), the applicant stated that the protective coating is excluded from the scope of license renewal since (1) it is not safety-related; and (2) the failure of the protective coating will not prevent satisfactory accomplishment of a safety function.

In RAI B.1.10-5, the staff requested that the applicant to provide more information on the CNS service level 1 coating program. In response to RAI B.1.10-5, the applicant stated that the CNS service level 1 coating program (1) provides specific instructions for maintenance of safety-related coatings applied to concrete and steel surfaces within the drywell and torus; and (2) ensures that service level 1 coating is applied and maintained such that the coating will not become detached creating potential debris.

The response to RAI 2.4-2(c) is not consistent with the response to RAI B.1.10-5 relative to safety function classification. The staff requested the applicant to clarify this inconsistency.

The applicant provided the following clarifications:

The applicant retracts previous statements that indicated why protective coating is not in the scope of license renewal. The basis for why protective coating is not listed in the license renewal application (LRA) is that the protective coatings are a system, structure, or components (SSCs) and therefore were not evaluated for scoping in accordance with the license renewal rule. Service level 1 protective coatings are procured and treated with the quality standards applied to safety-related SSCs. They are treated as a part of the structures and components to which they are applied. As such, coatings are examined during inspections of those structures and components, such as those performed under external surfaces monitoring and containment ISI-IWE programs. To address the concern of impacts on ECCS suction strainers, the CNS coatings program was established as described in response to Generic Letter (GL) 98-04 (Ref. CNS letter NLS980166 to NRC, dated Nov. 4, 1998). This CNS program effectively manages the condition of protective coatings to ensure coating degradation does not negatively impact the ability of the ECCS pumps to perform intended functions.

Clarification for RAI B.1.15-7(d) Response Regarding Histogram Data Related to Metal Fatigue Analysis

The staff requested a supplement to the response to RAI B.1.15-7 (NLS2009040, June 15, 2009) which: a) explained why there were more startups than shutdowns and b) either to provide a validated histogram for cycles preceding 1996 (from initial plant start up), or as an alternative, provide a discussion of the cycles accrued for startup and shutdown prior to 1996 (from initial plant start up), in comparison with the 1996-2007 trend.

The applicant agreed to provide the requested supplement.

Clarification for RAI B.1.18-5 Response

In its response dated November 4, 2009, the applicant stated: “use of CHECWORKS satisfies the criterion for predictive modeling in the FAC Program, but the CHECWORKS software is not used to verify compliance with regulatory commitments.” The applicant also stated: “it should be noted that the use of CHECWORKS is not characterized as a regulatory commitment for future action proposed in the LRA, since the established FAC Program already includes the use of CHECWORKS as the analytical tool for predictive modeling.” The staff requested the applicant to clarify whether or not it commits to use CHECWORKS during the period of extended operation, in following Generic Aging Lessons Learned (GALL) Section XI.M17 (which credits use of a predictive code, such as CHECWORKS). The staff has a concern that the outputs of predictive software shall be validated so that wall thinning predictions can be relied upon for an effective aging management program.

The applicant provided the following clarifications:

The applicant believes meeting a commitment to have a predictive model does not make it Software QA Level B. It would only be SQA Level B if its outputs were being used to confirm compliance with a regulatory commitment. The applicant initiated a condition report in response to initial questioning of the software classification raised by the staff during the license renewal audit. The evaluation of this condition report under the corrective action program confirmed the classification was in accordance with procedures for the site software control program.

The applicant believes the current software classification is appropriate for CHECWORKS. With regard to its quality assurance pedigree, the CHECWORKS Steam/Feedwater Application was developed by Electric Power Research Institute (EPRI) in a manner controlled by an International Standard Organization 9001:1994 Quality Assurance program. It has wide acceptance in the nuclear industry as a tool to predict the rate of wall thinning on a component-by-component basis such that potential problem areas can be inspected and addressed before a leak can occur. Benchmarking with other licensees has found that the applicant's CHECWORKS software classification is consistent with others in the industry. Moreover, CHECWORKS is not the sole determinative means of selecting inspection sites. While it is an important tool, it is augmented by plant operating experience and the knowledge of the FAC Program Owner. Accordingly, the applicant does not believe there is a need to apply SQA Level B requirements to CHECWORKS for CNS operation.

The premise of this RAI appears to be that the applicant has inappropriately classified CHECWORKS as Software Quality Assurance (SQA) Level C, rather than Level B, based on the licensing basis credit afforded such software in the responses to NRC Bulletin 87-01 and GL 89-08, and Section A.1.1.18 of the LRA. The applicant has reviewed the associated regulatory correspondence with NRC Bulletin 87-01 and GL 89-08 in detail and maintains that the use of predictive software, such as CHECWORKS is not an ongoing regulatory commitment. Regarding the credit taken in the LRA for conforming to the GALL and to EPRI NSAC-202L (which references use of CHECWORKS or similar predictive software), the applicant acknowledges that there is a commitment to follow this during the period of extended operation (PEO).

Clarification for RAI 2.3.3.12 PD-5 Response

Background:

Initially, Section 2.3.3.12 of the LRA in the part that is labeled Radwaste System, the applicant listed "Provide a barrier to ground level release via the Z sump during accidents where the SGT (standby gas treatment) system must operate" as an intended function for 10 CFR 54.4(a)(1). In response to RAI 2.3.3.12 OG-6 and RAI 2.3.3.12 PD-3 dated August 17, 2009, the applicant revised the LRA and the above stated function to be applicable as an intended function for 10 CFR 54.4(a)(2). The applicant further explained this reclassification in response to RAI 2.3.3.12 PD-5 dated November 30, 2009, by stating that the specified function performed by the radwaste (RW) piping and valves downstream of the check valves (RW-CV-58CV and RW-CV-59CV), as shown on drawing LRA-2005-SH02, do not meet the criteria of 10 CFR 54.4(a)(1). The piping associated with the loop seals to the Z sump was not discussed.

USAR Chapter X, Section 14.0, “Equipment and Floor Drainage System,” paragraph 14.2.2 lists the function “provide a barrier to ground level release via the Z sump during accidents where the SGT system must operate,” as a safety design basis.

Issue:

Loss of any of the nine loop seals or the breakage of the line downstream of the check valves (RW-CV-58CV and RW-CV-59CV), as shown on drawing LRA-2005-SH02, could break the barrier to ground level release via the Z sump during accidents where the SGT must operate. This barrier as discussed above is a safety design basis described in USAR Chapter X, Section 14.0, paragraph 14.2.2.

Request:

Evaluate the loss of the barrier to ground level release by considering failure of the piping between the Z sump and any of the 9 loop seals or failure of the piping downstream of the check valves (RW-CV-58CV and RW-CV-59CV) during accidents where the SGT must operate. Verify the RW system function of “Provide a barrier to ground level release via the Z sump during accidents where the SGT system must operate,” is an intended function for 10 CFR 54.4(a)(1) or 10 CFR 54.4(a)(2) as applicable and revise the LRA accordingly.

The applicant and the staff provided the following clarifications:

The applicant explained that the term “safety design basis” in the CNS USAR does not equate to a safety-related function, as discussed in the response to RAI 2.3.3.12 PD-5. The current licensing basis for the loop seals and associated pipe to the Z sump is that they are not safety-related, and their function is not credited to mitigate a 10 CFR 100 release. Moreover, the issue appears to be moot in that the loop seals are in scope for (a)(2), and there is no additional attached pipings that would be in scope if they were in scope for (a)(1).

The staff accepted the applicant’s position, but requested that a supplemental response be submitted stating that the loop seals and associated pipe to the Z sump aren’t in the scope of license renewal in accordance with 10 CFR 54.4(a)(1) and can’t result in a 10 CFR 100 release. The applicant agreed to provide the requested supplemental response.

Clarification for Boral Neutron Attenuation Testing

The applicant requested clarification that the proposed commitment to perform boral coupon attenuation testing (provided in the January 8, 2010 conference call minutes) will be sufficient for resolution of reviewing issues associated with Boron Neutron Attenuation Testing raised by the staff for the license renewal safety evaluation report.

The staff and the applicant provided the following clarifications:

The staff agreed with the commitment, as written in the conference call summary of January 8, 2010 to be a part of a supplemental response from the applicant. However, the staff also requested that the supplemental responses provide a nexus to the Corrective Action Program if acceptance criteria are not met during the testing. The applicant agreed to address this in a supplemental response. From subsequent communication with the staff, the following proposed commitment wording was found acceptable:

"To verify there is no loss of neutron absorbing capacity of the Boral material, NPPD will supplement the Neutron Absorber Monitoring Program to include neutron attenuation testing of representative sample coupons. Acceptance criteria will be that measured or analyzed neutron-absorber capacity required to ensure the 5% subcriticality margin for the spent fuel pool is maintainted assuming neutron absorber degradation is the only mechanism. Results not meeting the acceptance criteria will be entered into the CNS Corrective Action program for disposition. One test will be performed prior to the period of extended operation (PEO), with another confirmatory test performed within the first 10 years of the PEO."

Clarification for Commitment to a Corrective Action to Resolve Main Steam Line Support System Issues by Performing a Plant Modification

The staff requested the applicant to clarify its commitment to implement the main steam line support modification prior to the period of extended operation for resolution of this issue for license renewal. The applicant agreed to make this commitment in a future correspondence. From subsequent communication with the staff, the following proposed commitment wording was found acceptable:

"NPPD will implement the plant modifications designed to correct the main steam line support discrepencies noted in RAI B.1.20-1 prior the PEO."

Torus Coating

At the conclusion of the conference call, the staff determined that the response to RAI B.1.10-6 (provided in NLS2009100, dated December 21, 2009) was not satisfactory. A new Open Item associated with this RAI was being generated with specific concerns to be forwarded to NPPD in the near future.

Cooper Nuclear Station

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