



Nebraska Public Power District

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NLS2014031
April 11, 2014

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

Subject: Revisions to NFPA 805 License Amendment Request and Response to a Request For Additional Information
Cooper Nuclear Station, Docket No. 50-298, DPR-46

Reference:

1. E-mail from Joseph Sebrosky, U.S. Nuclear Regulatory Commission, to David Van Der Kamp and William R. Victor, Nebraska Public Power District, dated March 18, 2014, "Proposed NFPA 805 License Condition"
2. Letter from Brian J. O'Grady, Nebraska Public Power District, to U.S. Nuclear Regulatory Commission, dated April 24, 2012, "License Amendment Request to Revise the Fire Protection Licensing Basis to NFPA 805 Per 10 CFR 50.48(c)" (NLS2012006)
3. Letter from Oscar A. Limpias, Nebraska Public Power District, to U.S. Nuclear Regulatory Commission, dated February 18, 2014, "Supplement to 60-Day Response to Request For Additional Information Regarding License Amendment Request To Adopt National Fire Protection Association Standard 805" (NLS2014015)

Dear Sir or Madam:

The purpose of this letter is for the Nebraska Public Power District to provide the Nuclear Regulatory Commission: a) a revision to License Condition 2.C(4) as specified in Reference 1; b) the final clean, retyped revised pages of the License, pursuant to the License Amendment Request (LAR) to adopt National Fire Protection Association (NFPA) Standard 805 as the fire protection licensing basis for Cooper Nuclear Station (Reference 2), and c) certain changes to the NFPA 805 LAR and a Request for Additional Information (RAI) response. The revisions to the LAR (including the License Condition change) and the RAI response are attached. The final clean, retyped revised pages of the Operating License which reflect Reference 3, as well as the attached revision, are enclosed. All changes remain bounded by the original No Significant Hazards Consideration and Environmental Review.

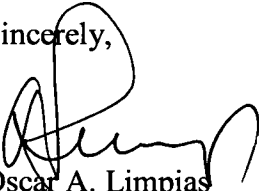
There are no commitments made in this submittal. Should you have any questions concerning this matter, please contact Troy Barker, Engineering Programs and Components Manager, at (402) 825-5027.

A006
MLR

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

Executed on 4 - 11 - 14
(Date)

Sincerely,



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

OAL/wv

Attachment: Revision to the Cooper Nuclear Station License Amendment Request To Revise the Fire Protection Licensing Basis to NFPA 805 Per 10 CFR 50.48(c) and a Request for Additional Information Response

Enclosure: Clean, Retyped License Pages

cc: Regional Administrator w/ Attachment and Enclosure
USNRC - Region IV

Cooper Project Manager w/ Attachment and Enclosure
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector w/ Attachment and Enclosure
USNRC - CNS

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

NPG Distribution w/o Attachment and Enclosure

CNS Records w/ Attachment and Enclosure

Attachment

Revision to the Cooper Nuclear Station
License Amendment Request To Revise the Fire Protection Licensing Basis
to NFPA 805 Per 10 CFR 50.48(c) and a Request for Additional Information Response

This attachment provides two errata changes to the National Fire Protection Association (NFPA) Standard 805 License Amendment Request (LAR) resulting from the review of the draft Safety Evaluation for that LAR. A change is also made to License Condition 2.C(4), "Fire Protection," as specified in an e-mail from the Nuclear Regulatory Commission (NRC) Cooper Nuclear Station (CNS) Project Manager to the CNS Licensing Manager and Licensing Lead on March 18, 2014. Finally, a revision is made to FPE RAI 10. The changes are presented in underline/strikeout format.

1. Section 4.2.3, "Licensing Action Transition," is revised to read:
 - Exemption from the requirement for an automatic suppression system in the Control Building Basement, ~~903' 6" Elevation~~.

Reference: Elevation information is not contained in the Exemption issued with the NRC September 21, 1983, Safety Evaluation.

2. Table I-1, "CNS Power Block Definition," is revised to read¹:

Table I-1 CNS Power Block Definition	
Building/Structure	Fire Area(s)
Reactor Building	RB-A, RB-B, RB-CF, RB-DI, RB-E, RB-FN, RB-J, RB-K, RB-M, RB-N, RB-P, RB-T, RB-V, TB-C, DW
Control Building	CB-A, CB-A-1, CB-B, CB-C, CB-D
Turbine Generator Building	TB-A
Diesel Generator Building	DG-A, DG-B
Water Treatment Building	TB-A
Intake Structure	IS-A
Radwaste Building	TB-A

¹ This table reflects changes made in NLS2013011, dated January 14, 2013 [ADAMS Accession Number ML13018A006].

Augmented Radwaste Building	TB-A
Fire Pump House	YD
Offgas Building	TB -AYD
Optimum Water Chemistry Building	YD
Hydrogen Storage Building	YD
Multi-Purpose Facility (MPF)	TB-A
Offsite power distribution equipment (i.e., main transformers, emergency transformer, and start-up transformer), portions of the non-safety power distribution system (i.e., 161 kV switchyard and 345 kV switchyard), and the diesel generator oil storage transfer pumps	YD

Reference: Consistency with Table B-3 for YD Fire Area.

3. Attachment M, "License Condition Changes," Section 2.C(4)(b), "Other Changes that May Be Made Without Prior NRC Approval," is revised to read:

Other Changes that May Be Made Without Prior NRC Approval

(1) Changes to NFPA 805, Chapter 3, Fundamental Fire Protection Program

Prior NRC review and approval are not required for changes to the NFPA 805, Chapter 3, fundamental fire protection program elements and design requirements for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is functionally equivalent or adequate for the hazard. The licensee may use an engineering evaluation to demonstrate that a change to an NFPA 805, Chapter 3, element is functionally equivalent to the corresponding technical requirement. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard.

The licensee may use an engineering evaluation to demonstrate that changes to certain NFPA 805, Chapter 3, elements are acceptable because the alternative is "adequate for the hazard." Prior NRC review and approval would not be required for alternatives to four specific sections of NFPA 805, Chapter 3, for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is adequate for the hazard. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure,

or physical arrangement, using a relevant technical requirement or standard. The four specific sections of NFPA 805, Chapter 3, are as follows:

- "Fire Alarm and Detection Systems" (Section 3.8);
- "Automatic and Manual Water-Based Fire Suppression Systems" (Section 3.9);
- "Gaseous Fire Suppression Systems" (Section 3.10); and
- "Passive Fire Protection Features" (Section 3.11).

This License Condition does not apply to any demonstration of equivalency under Section 1.7 of NFPA 805.

(2) Fire Protection Program Changes that Have No More than Minimal Risk Impact

Prior NRC review and approval are not required for changes to the licensee's fire protection program that have been demonstrated to have no more than a minimal risk impact. The licensee may use its screening process as approved in the NRC safety evaluation report dated _____ to determine that certain fire protection program changes meet the minimal criterion. The licensee shall ensure that fire protection defense-in-depth and safety margins are maintained when changes are made to the fire protection program.

Reference: This change is made per NRC request, as described in the introductory paragraph.

4. The response to the third paragraph of FPE RAI 10 is revised as follows:²

Implementation Item S-2.4 states that appropriate compensatory measures will be established per Procedure 0.23, as required, until the modification is implemented. More specifically, during the times when the incipient detection in Relay Panels 9-32 and 9-33 is out of service post-implementation (including the period between post-transition and prior to completion of the modification), plant procedures will provide a continuous fire watch in the Auxiliary Relay Room. The continuous fire watch will utilize hand-held incipient detection which will provide compensatory measures equivalent to the incipient detection when the system is unavailable or inoperable. Upon issuance of the Safety Evaluation, NPPD will implement compensatory measures in accordance with Procedure 0.23, "CNS Fire Protection Plan," and will remain in place until the implementation of the NFPA 805 procedures and training that are related to incipient detection for Relay Panel 9-32 and 9-33.

² This RAI was responded to in NLS2013011, dated January 14, 2013 [ADAMS Accession Number ML13018A006].

Reference: This change stemmed from review of the draft Safety Evaluation and discussions with the NRC Staff. Hand-held incipient detection has been reassessed as not necessary for the continuous fire watch to be effective. The modification for incipient detection is expected to be completed in August 2014, which will entail continued compensatory measures until appropriate procedures and training are in place.

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Enclosure

Enclosure

Clean, Retyped License Pages

- (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by operation of the facility.
- C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2419 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Cooper Nuclear Station Safeguards Plan," submitted by letter dated May 17, 2006.

NPPD shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The NPPD CSP was approved by License Amendment No. 238 as supplemented by a change approved by License Amendment No. 244.

(4) Fire Protection

NPPD shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the licensee amendment request dated April 24, 2012 (and supplements dated July 12, 2012, January 14, 2013, February 12, 2013, March 13, 2013, June 13, 2013, December 12, 2013, January 17, 2014, February 18, 2014, and April 11, 2014) and as approved in the safety evaluation report dated _____ (and supplements dated _____). Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

(a) Risk-Informed Changes that May Be Made Without Prior NRC Approval

A risk assessment of the change must demonstrate that the acceptance criteria below are met. The risk assessment approach, methods, and data shall be acceptable to the NRC and shall be appropriate for the nature and scope of the change being evaluated; be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at CNS. Acceptable methods to assess the risk of the change may include methods that have been used in the peer-reviewed fire PRA model, methods that have been approved by NRC through a plant-specific license amendment or NRC approval of generic methods specifically for use in NFPA 805 risk assessments, or methods that have been demonstrated to bound the risk impact.

1. Prior NRC review and approval is not required for changes that clearly result in a decrease in risk. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.
2. Prior NRC review and approval is not required for individual changes that result in a risk increase less than 1×10^{-7} /year (yr) for CDF and less than 1×10^{-8} /yr for LERF. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.

(b) Other Changes that May Be Made Without Prior NRC Approval

1. Changes to NFPA 805, Chapter 3, Fundamental Fire Protection Program

Prior NRC review and approval are not required for changes to the NFPA 805, Chapter 3, fundamental fire protection program elements and design requirements for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is functionally equivalent or adequate for the hazard. The licensee may use an engineering evaluation to demonstrate that a change to an NFPA 805, Chapter 3, element is functionally equivalent to the corresponding technical requirement. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard.

The licensee may use an engineering evaluation to demonstrate that changes to certain NFPA 805, Chapter 3, elements are acceptable because the alternative is "adequate for the hazard." Prior NRC review and approval would not be required for alternatives to four specific sections of NFPA 805, Chapter 3, for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is adequate for the hazard. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard. The four specific sections of NFPA 805, Chapter 3, are as follows:

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- "Automatic and Manual Water-Based Fire Suppression Systems" (Section 3.9);
- "Gaseous Fire Suppression Systems" (Section 3.10); and
- "Passive Fire Protection Features" (Section 3.11).

This License Condition does not apply to any demonstration of equivalency under Section 1.7 of NFPA 805.

2. Fire Protection Program Changes that Have No More than Minimal Risk Impact

Prior NRC review and approval are not required for changes to the licensee's fire protection program that have been demonstrated to have no more than a minimal risk impact. The licensee may use its screening process as approved in the NRC safety evaluation report dated _____ to determine that certain fire protection program changes meet the minimal criterion. The licensee shall ensure that fire protection defense-in-depth and safety margins are maintained when changes are made to the fire protection program.

(c) Transition License Conditions

1. Before achieving full compliance with 10 CFR 50.48(c), as specified by (c)2. below, risk-informed changes to NPPD's fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in (b)2. above.
2. The licensee shall implement the modifications to its facility, as described in Table S-2, "Plant Modifications Committed," of NPPD letter NLS2014015, dated February 18, 2014, to complete the transition to full compliance with 10 CFR 50.48(c) prior to startup from the first refueling outage greater than 12 months following the issuance of the License Amendment. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications.
3. The licensee shall implement the items S-3.1 through S-3.29 as listed in Table S-3, "Implementation Items," of NPPD letter NLS2014015, dated February 18, 2014, within twelve months after issuance of the License Amendment.
4. The licensee shall implement item S-3.30 as listed in Table S-3, "Implementation Items," of NPPD letter NLS2014015, dated February 18, 2014, no later than May 31, 2017.

(5) Additional Conditions

The Additional Conditions contained in Appendix C, as revised through Amendment No. 178, are hereby incorporated into this license. Nebraska Public Power District shall operate the facility in accordance with the Additional Conditions.

(6) Deleted

(7) Mitigation Strategy License Condition

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
 - 1. Pre-defined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3. Designated staging areas for equipment and materials
 - 4. Command and control
 - 5. Training of response personnel
 - (b) Operations to mitigate fuel damage considering the following:
 - 1. Protection and use of personnel assets
 - 2. Communications
 - 3. Minimizing fire spread
 - 4. Procedures for implementing integrated fire response strategy
 - 5. Identification of readily-available pre-staged equipment
 - 6. Training on integrated fire response strategy
 - 7. Spent fuel pool mitigation measures
 - (c) Actions to minimize release to include consideration of:
 - 1. Water spray scrubbing
 - 2. Dose to onsite responders
- (8) The licensee shall implement and maintain all Actions required by Attachment 2 to NRC Order EA-06-137, issued June 20, 2006, except the last action that requires incorporation of the strategies into the site security plan, contingency plan, emergency plan and/or guard training and qualification plan, as appropriate.
- (9) Upon implementation of Amendment No. 230 adopting TSTF-448-A, Revision 3, the determination of control room envelope (CRE) unfiltered air inleakage as required by SR 3.7.4.4, in accordance with Specification 5.5.13.c.(i), the assessment of CRE habitability as required by Specification 5.5.13.c.(ii), and the measurement of CRE pressure as required by Specification 5.5.13.d, shall be considered met. Following implementation:
- (a) The first performance of SR 3.7.4.4, in accordance with Specification 5.5.13.c.(i), shall be within the specified Frequency of 6 years, plus the 18-month allowance of SR 3.0.2, as measured from July 12, 2004, the date of the most recent successful tracer gas test. (The tracer gas test was stated to have been performed in July, 2004, in the September 30, 2004 letter response to Generic Letter 2003-01).
 - (b) The first performance of the periodic assessment of CRE habitability, Specification 5.5.13.c.(ii), shall be within the next 9 months.
 - (c) The first performance of the periodic measurement of CRE pressure, Specification 5.5.13.d, shall be within 18 months, plus the 138 days allowed by SR 3.0.2, as measured from May 4, 2007, the date of the most recent successful pressure measurement test.

D. (Not Used)

- E. The Updated Safety Analysis Report (USAR) supplement, as revised, submitted pursuant to 10 CFR 54.21(d), shall be included in the next scheduled update to the USAR required by 10 CFR 50.71(e)(4), as appropriate, following the issuance of this renewed operating license. Commitment Numbers NLS2008071-01 (Revision 1), NLS2008071-02 through 04, NLS2008071-05 (Revision 1), NLS2008071-06 (Revision 1), NLS2008071-07, NLS2008071-08 (Revision 3), NLS2008071-09, NLS2008071-10, NLS2008071-11 (Revision 1), NLS2008071-12 through 15, NLS2008071-16 (Revision 2), NLS2008071-17 through 22, NLS2008071-23 (Revision 1), NLS2008071-24, NLS2008071-25 (and Supplement 1), NLS2008071-26, NLS2009100-1 (Revision 1), NLS2009100-2, NLS2009100-3, NLS2010019-01, NLS2010019-02, NLS2010044-01, NLS2010050-01 through NLS2010050-03, NLS2010050-04 (Revision 1), NLS2010050-05 (Revision 1), NLS2010050-06, NLS2010062-01, and NLS2010062-02 shall be incorporated in the first update to the USAR required by 10 CFR 50.71(e)(4) following incorporation of the original USAR supplement. Until these respective updates are complete, the licensee may not make changes to the information in the supplement, or the above commitments. Following incorporation of the supplement and commitments into the USAR, the need for Commission approval of any changes will be governed by 10 CFR 50.59.
- F. The USAR supplement, as revised, describes certain future activities to be completed prior to and/or during the period of extended operation. The licensee shall complete these activities in accordance with Appendix A of NUREG-1944, "Safety Evaluation Report Related to the License Renewal of Cooper Nuclear Station," dated October 2010, as supplemented by letters from the licensee to the U.S. Nuclear Regulatory Commission (NRC) dated November 15 and 18, 2010. The licensee shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.
- G. This license is effective as of the date of issuance and shall expire at midnight, January 18, 2034.

FOR THE NUCLEAR REGULATORY COMMISSION

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation

Attachments:
Appendices A&B - Technical Specifications
Appendix C - Additional Conditions

Date of Issuance: November 29, 2010