

444 South 16th Street Mall
Omaha, NE 68102-2247

LIC-11-0099
September 28, 2011

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

References: (See Page 4 for the Reference List.)

SUBJECT: License Amendment Request 10-07, Proposed Changes to Adopt NFPA 805, Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition) at Fort Calhoun Station

Pursuant to 10 CFR 50.90, the Omaha Public Power District (OPPD) requests an amendment to Renewed Facility Operating License No. DPR-40 for Fort Calhoun Station (FCS), Unit No. 1, to adopt National Fire Protection Association (NFPA) 805, *Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition)*. Implementation of the regulatory actions presented in the attachments to this license amendment request (LAR) will enable FCS to adopt a new fire protection licensing basis which complies with the requirements in 10 CFR 50.48(a), 10 CFR 50.48(c), and the guidance in Regulatory Guide (RG) 1.205, Revision 1. (Reference 2)

OPPD submitted its letter of intent to adopt NFPA 805 at FCS in Reference 3. According to Reference 3, it was expected to take approximately 36 months to develop the NFPA 805 transition LAR; thus, OPPD requested enforcement discretion for 36 months. In Reference 4, the NRC granted OPPD enforcement discretion for its transition to NFPA 805 until June 9, 2011.

As requested by the NRC in Reference 8, on May 26, 2011, OPPD participated in a public pre-licensing teleconference with the NRC to discuss the NFPA 805 transition LAR. Subsequent to the pre-licensing teleconference, the NRC requested a follow-up teleconference with OPPD staff (Reference 9). Per discussion with Messrs. Donnie Harrison and Alex Klein during the follow-up teleconference on May 27th (Reference 9), the NRC indicated that it would be a more efficient use of the NRC resources as discussed in Reference 7, if the NRC's review of the LAR submittal did not necessitate review of alternative fire probabilistic risk assessment (PRA) methods. The alternative methods are being reviewed by the Industry New Methods Peer Review Panel to demonstrate their acceptability for use in a fire PRA.

SECURITY-RELATED INFORMATION - WITHHOLD FROM PUBLIC DISCLOSURE UNDER 10 CFR 2.390
Enclosure 1, Attachments A, C, D, G, K, S, T, and W to this letter contain security-related information.
Upon removal of Attachments A, C, D, G, K, S, T, and W of Enclosure 1, this letter is Decontrolled.

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OPPD used the draft version of frequently asked question (FAQ) 08-0050, *Non-Suppression Probability*, which was the version available at the time the fire PRA task was being performed. In addition to the draft FAQ 08-0050, OPPD used three alternative methods in the development of the FCS fire PRA model for severity factor/non-suppression probability for electrical cabinets; pump fire frequency; and diesel generator severity factor/non-suppression probability.

OPPD used NUREG/CR-6850 (Reference 5) and NUREG/CR-6850, Supplement 1 (Reference 6), in the development of the fire PRA model and the NFPA 805 transition LAR. Reference 6 states, in part, "Although these FAQs represent interim solutions, it should be noted that not all solutions require longer-term research to develop a lasting and more complete solution. In addition, EPRI 1011989, NUREG/CR-6850 represents one way to develop a fire PRA. Alternative methods may be acceptable provided they can be supported by the state of the art in fire PRA model development."

However, as indicated in Reference 11, the NRC would not accept the FCS transition LAR with the use of alternative methods. As a result, OPPD extended the commitment to transition to NFPA 805 until the alternative methods could be approved by the industry review panel and the impact, if any, could be determined and incorporated into the FCS fire PRA model. In Reference 10, OPPD committed to submit the LAR for transitioning to NFPA 805 no later than 90 days after the industry review panel completes its reviews of the alternative methods. However, based on further discussions with NRC staff, per Reference 12, OPPD has until September 30, 2011, to submit its NFPA 805 LAR to continue to have uninterrupted enforcement discretion. In Reference 12, the NRC stated that the staff recognizes FCS's need for additional time to integrate the Task Force reviewed methods or conduct a sensitivity analysis of any unreviewed methods.

Therefore, OPPD performed sensitivity studies that demonstrate FCS satisfies the NFPA 805 acceptance criteria, even if the four alternate methods identified above are replaced by methods within the guidance of NUREG/CR-6850 and its Supplement 1. Although the acceptance criteria would still be met without the use of alternate methods, the alternate methods are retained in the model to help focus on, and provide more realistic, risk significant insights and to better align with similar methods currently under development and review by the industry and the NRC. Results of the sensitivity studies are provided in Attachment W of Enclosure 1.

As documented in this request, OPPD has met the NRC's regulatory requirements for the transition of the FCS fire protection licensing basis. The proposed changes to the FCS operating license condition and Technical Specifications (mark-ups and clean pages) are provided in Attachments M and N, respectively. OPPD concludes that the proposed LAR presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c). Pursuant to 10 CFR 51.22(b), no environmental impact or environmental assessment needs to be prepared in connection with the issuance of this amendment.

Information associated with the FCS transition to NFPA 805 is provided in the enclosed FCS Transition Report (TR), including the technical and regulatory justifications required to support this LAR. Enclosure 1 to this letter provides the FCS TR and its supporting attachments. Consistent with the industry template for NFPA 805 transition, the major topics are presented as Attachments A through W in Enclosure 1.

OPPD requests that Attachments A, C, D, G, K, S, T, and W to Enclosure 1, which contain sensitive security-related information, be withheld from public disclosure pursuant to 10 CFR 2.390.

There are no regulatory commitments being made in this LAR submittal. As part of the transition license condition, OPPD shall implement the necessary modifications to FCS to complete the transition to full compliance with 10 CFR 50.48(c) by the end of the second refueling outage after receipt of the NRC's Safety Evaluation Report (SER) approving this LAR. A list of plant modifications necessary to complete the transition to the new fire protection license basis are identified in Enclosure 1, Attachment S, Table S-2, *Plant Modifications Committed*. These modifications are being tracked via action request (AR) 48249 for completion.

In accordance with the guidance in Regulatory Position C.2.2 of RG 1.205, Revision 1 (Reference 2), the total risk change associated with pre-transition fire protection program variances meeting the NFPA 805 performance-based approach (via the change evaluation process) was evaluated.

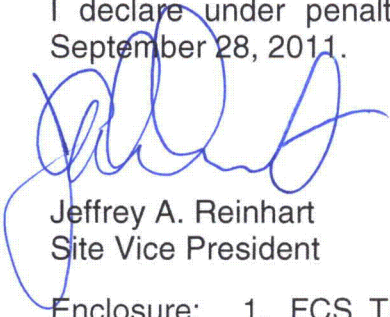
Upon completion of the plant modifications, as referenced in the TR Section 4.8.2, the total change in risk associated with the FCS transition to NFPA 805 will be consistent with the acceptance guidelines in RG 1.174, Revision 1 (Reference 13).

The TR Section 5.4 contains OPPD's proposed implementation schedule for transitioning FCS to the new fire protection licensing basis. Based on this, OPPD requests approval of this proposed amendment in accordance with the NRC's current schedule, with implementation of the amendment to occur within 180 days of approval.

In accordance with 10 CFR 50.91, a copy of this application, without the security-related attachments, is being provided to the designated State of Nebraska official.

If you should have any questions regarding this NFPA 805 Transition LAR or require additional information, please contact Mr. Bill R. Hansher at 402-533-6894.

I declare under penalty of perjury that the foregoing is true and correct. Executed on September 28, 2011.



Jeffrey A. Reinhart
Site Vice President

Enclosure: 1. FCS Transition Report [consisting of Attachments A through W, portions of which contain sensitive information not for public disclosure]

- c: E. E. Collins, Jr., NRC Regional Administrator, Region IV – Enclosure 1 on CD
L. E. Wilkins, NRC Project Manager – Enclosure 1 on CD
J. C. Kirkland, NRC Senior Resident Inspector – Enclosure 1 on CD
Manager, Radiation Control Program, Nebraska Health & Human Services, R&L Public Health Assurance, State of Nebraska – Enclosure 1 on CD (w/o Attachments A, C, D, G, K, S, T, and W)

Reference List

1. Docket No. 50-285
2. US NRC Regulatory Guide 1.205, "Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants," Revision 1, dated December 2009 (ML092730314)
3. Letter from OPPD (D. J. Bannister) to NRC (Document Control Desk), "Letter of Intent to Adopt NFPA 805, Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants, 2001 Edition," dated June 9, 2008 (LIC-08-0069)
4. Letter from NRC (J. G. Giitter) to OPPD (D. J. Bannister), "Fort Calhoun Station, Unit No.1 - Response to Letter of Intent to Adopt National Fire Protection Association Standard 805 (TAC No. MD9736)," dated November 20, 2008 (NRC-08-0107) (ML082710002)
5. NUREG/CR-6850, EPRI/NRC-RES Fire PRA Methodology for Nuclear Power Facilities, Electric Power Research Institute - EPRI 1011989, Final Report, September 2005
6. NUREG/CR-6850, Supplement 1, Fire Probabilistic Risk Assessment Methods Enhancements, Supplement 1 to NUREG/CR-6850 and EPRI 1011989, Electric Power Research Institute - EPRI 1019259, Technical Report, September 2010
7. NRC Staff Requirements Memorandum, SRM-SECY-11-0033, "Proposed NRC Staff Approach to Address Resource Challenges Associated with Review of a Large Number of NFPA 805 License Amendment Requests," dated April 20, 2011
8. Memo from NRC (L. E. Wilkins) to NRC (M. T. Markley), "Pre-Licensing Teleconference with Omaha Public Power District (TAC No. ME6242)," dated May 26, 2011 (ML111330643)
9. Teleconference between NRC (L. E. Wilkins, et. al.) and OPPD (B. R. Hansher, et. al.), NRC Relay of Information to OPPD on Slide 16 of NFPA 805 Transition LAR Pre-Submittal Teleconference Presentation, May 27, 2011
10. Letter from OPPD (H. J. Faulhaber) to NRC (Document Control Desk), "Notification of Extension of Commitment to Adopt NFPA 805, Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition) at Fort Calhoun Station Unit No. 1," dated June 9, 2011 (LIC-11-0054)
11. Letter from NRC (L.E. Wilkins) to OPPD, "Summary of Pre-Licensing Meeting Held on May 26, 2011, with Omaha Public Power District to Discuss Request to Adopt National Fire Protection Association Standard NFPA-805 for Fort Calhoun Station, Unit No.1 (TAC No. ME6242)," dated July 11, 2011 (NRC-11-0073) (ML111680151)
12. Letter from NRC (J. G. Giitter) to OPPD (D. J. Bannister), "Fort Calhoun Station, Unit No.1 - Response to Request for Extending Enforcement Discretion Deadline to Adopt National Fire Protection Association Standard 805 (TAC No. ME6643)," dated July 22, 2011 (NRC-11-0079) (ML111960435)
13. NRC Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," Revision 1, dated November 2002 (ML023240437)