



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 27, 2016

Mr. Shane M. Marik
Site Vice President and
Chief Nuclear Officer
Omaha Public Power District
Fort Calhoun Station
9610 Power Lane, Mail Stop FC-2-4
Blair, NE 68008

SUBJECT: FORT CALHOUN STATION, UNIT NO. 1 – REQUEST FOR ADDITIONAL
INFORMATION RE: REVISE CURRENT LICENSING BASIS TO ALLOW USE
OF EQUIPMENT CLASSIFICATION METHODOLOGY FROM
ANSI/ANS-58.14-2011 (CAC NO. MF6721)

Dear Mr. Marik:

By letter dated September 10, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15258A680), Omaha Public Power District submitted a license amendment request to revise the current licensing basis to allow the use of an equipment classification methodology from the American Nuclear Standards Institute/American Nuclear Society (ANSI/ANS)-58.14-2011 at Fort Calhoun Station, Unit No. 1.

The U.S. Nuclear Regulatory Commission (NRC) staff requested additional information (RAI) by letter dated February 23, 2016 (ADAMS Accession No. ML16048A154), in order to complete its review. The NRC staff found that your response dated April 8, 2016 (ADAMS Accession No. ML16099A173), to the RAI questions is incomplete. The enclosed questions were provided to E. Matzke of your staff on April 27, 2016. Please provide a response to the enclosed questions within 30 days of the date of this letter. Failure to provide complete information to this request may result in staff action in accordance with 10 CFR 2.108, "Denial of application for failure to supply information."

S. Marik

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If you have any questions, please contact me at 301-415-2296 or via e-mail at Fred.Lyon@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "CFlyon". The letters are cursive and somewhat stylized.

Carl F. Lyon, Project Manager
Plant Licensing Branch IV-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION

LICENSE AMENDMENT REQUEST

OMAHA PUBLIC POWER DISTRICT

FORT CALHOUN STATION, UNIT NO. 1

DOCKET NO. 50-285

By letter dated September 10, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15258A680), Omaha Public Power District (the licensee) submitted a license amendment request (LAR) to revise the current licensing basis to allow the use of an equipment classification methodology from the American Nuclear Standards Institute/American Nuclear Society (ANSI/ANS)-58.14-2011 at Fort Calhoun Station, Unit No. 1 (FCS).

The U.S. Nuclear Regulatory Commission (NRC) staff requested additional information (RAI) by letter dated February 23, 2016 (ADAMS Accession No. ML16048A154), in order to complete its review. The NRC staff that found the licensee's response dated April 8, 2016 (ADAMS Accession No. ML16099A173), to the RAI questions is incomplete. The additional information discussed below is required in order to complete its formal review of the request.

RAI-1

Revised Section 4.0, "Seismic Classifications," of the proposed LAR states that there are three seismic classifications for FCS structures, systems, and components (SSCs): Seismic Category I, Seismic Category II, and Non-seismic. However, Section 2, "Seismic Criteria, Analysis and Instrumentation," of Appendix F of the Updated Safety Analysis Report (USAR) only addresses seismic criteria for Class I and Class II. The change of seismic classification from two classes to three classes should be consistent throughout the USAR. Please:

- (a) *Indicate likely USAR revisions to capture the above comment;*
- (b) *Provide the seismic design criteria for Seismic Category II SSCs in the LAR and indicate likely USAR revisions to address this comment;*
- (c) *Identify the design control document that lists Seismic Category II SSCs.*

RAI-1(a) requested that the licensee indicate the USAR revisions necessary to address changes to the Seismic Category for SSCs. The RAI response states that, "Class II seismic criteria is defined in USAR Appendix F. This will be revised as Non-Seismic." The response does indicate the sections of the USAR that will be changed. Please provide a USAR markup with the proposed changes.

The RAI response states that, "The term Seismic Category II from ANSI 58.14 replaces seismic class II/I and is included in the proposed changes to the USAR Appendix N and the definition will be added to the USAR Appendix F"; however, seismic Class II/I is not indicated in the

Enclosure

proposed changes to the USAR Appendix N. Please provide a USAR markup with the proposed changes.

RAI-1(b) requested that the licensee provide the design criteria for Seismic Category II SSCs. The response provided the principle for the criteria, but not the design acceptance criteria for Seismic Category II SSCs. Please provide the design acceptance criteria for Seismic Category II SSCs.

RAI-1(c) requested that the licensee provide the design control document that lists Seismic Category II SSCs. The response stated that, "As part of the equipment classification project the affected equipment will be identified and the plant components database (Asset Suite) will be updated to specify Seismic Category II. Applicable design guidance will be added to the affected design control documents, such as CC-FC-309-1011-AD-MEI-5." The response did not identify the Seismic Category II SSCs. Please identify the Seismic Category II SSCs.

RAI-2

The proposed LAR eliminates many sections, including safety class interfaces, correlations between safety class and equipment design code, and quality assurance (including Table N-2). Since the sections removed from the USAR will no longer be part of the current licensing basis for FCS, please provide justification for removing these sections from the licensing basis.

The application proposes to remove the design criteria and the correlation between safety class, equipment design, and quality assurance. The RAI response states that "Applicable ASME [American Society of Mechanical Engineers] and ANSI code classes are included in USAR Appendix F and elsewhere in the USAR"; however, Appendix F and ANSI/ANS-58.14-2011, Section 6, Table 1, do not list the corresponding criteria.

FCS was licensed to 1967 construction codes, and the licensee proposes to reclassify equipment to ANSI/ANS 58.14-2011. Please provide the basis and reconciliation from the current design basis classification to ANSI/ANS 58-14-2011 to demonstrate that the reclassified SSCs will meet the design criteria in ANSI/ANS 58-14-2011. In addition, please provide a USAR Markup with the proposed changes.

RAI-3

Table N-1, "Basic Design Requirements," of the proposed LAR states that pressure integrity Class C-4 (equivalent to safety class A) is either Seismic Category II or "no requirements specified." However, Section 2.0 of the proposed LAR states that safety class A is non-safety-related with augmented requirements (i.e., those SSCs are not safety-related but are relied upon during a special event, such as station blackout, or to which a licensing requirement or commitment applies. Therefore, based on Table N-1, those non-safety related SSCs with augmented requirements may correspond to either Seismic Category II or "no requirements specified." Please justify why safety class A or pressure integrity Class C-4 is designated as either Seismic Category II or "no requirements required."

The NRC staff understands the RAI response that each category shown in USAR Table N-1 is considered independent of the others. However, the staff's concern is that it appears that no basic design requirements are required for Safety Class A and N. ANSI/ANS-58.14-2011,

Section 6, Table 1 states that no basic design requirements are specified *in this standard*. ANSI/ANS does not provide basic design requirements; therefore, the licensee must provide the basic design requirements for all Safety Classes and Categories. USAR Table N-1 does not appear to be acceptable, because it does not provide the basic design requirements for all Safety Classes and Categories.

The definition of Class C-4 states that pressure-retaining portions of SSCs are subjected to at least one significant licensing requirement or commitment. Please provide the Class C-4 basic design requirements. If Class C-4 does not address seismic qualification, please explain you are fulfilling the definition for significant licensing requirement or commitment with SSCs for a failure during and after a seismic event.

S. Marik

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If you have any questions, please contact me at 301-415-2296 or via e-mail at Fred.Lyon@nrc.gov.

Sincerely,

/RA/

Carl F. Lyon, Project Manager
Plant Licensing Branch IV-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosure:
Request for Additional Information

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