



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

August 31, 2012

Mr. David J. Bannister
Vice President and CNO
Omaha Public Power District
Fort Calhoun Station
444 South 16th St. Mall
Omaha, NE 68102-2247

SUBJECT: FORT CALHOUN STATION, UNIT NO. 1 – REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST TO ESTABLISH THE REACTOR PROTECTIVE SYSTEM ACTUATION CIRCUITS LIMITING CONDITION FOR OPERATION (TAC ME8038)

Dear Mr. Bannister:

By letter dated February 10, 2012 (Agencywide Documents Access and Management System Accession No. ML12046A838), Omaha Public Power District requested an amendment to Renewed Facility Operating License No. DPR-40 for Fort Calhoun Station, Unit 1. The proposed amendment would establish the limiting condition for operation requirements for the reactor protective system actuation circuits in Technical Specification 2.15, "Instrumentation and Control Systems."

The Nuclear Regulatory Commission staff has reviewed the information provided in your application and determined that additional information is required in order to complete its review. A draft copy of the enclosed request for additional information was provided to Mr. Bill Hansher of your staff via e-mail on July 13, 2012. During a teleconference on August 14, 2012, Ms. Donna Lippy of your staff indicated that the response would be provided within 30 days of receipt of this letter.

If you have any questions, please contact me at 301-415-1377 or via e-mail at lynnea.wilkins@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Lynnea E. Wilkins".

Lynnea E. Wilkins, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosure:
As stated

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION
LICENSE AMENDMENT REQUEST FOR FORT CALHOUN STATION TO ESTABLISH THE
REACTOR PROTECTIVE SYSTEM ACTUATION CIRCUITS LIMITING CONDITION FOR
OPERATION OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN STATION, UNIT NO. 1
DOCKET NO. 50-285

By letter dated February 10, 2012 (Agencywide Documents Access and Management System Accession No. ML12046A838), Omaha Public Power District (OPPD, the licensee) requested an amendment to Renewed Facility Operating License No. DPR-40 for Fort Calhoun Station, Unit 1 (FCS). The proposed amendment would establish the limiting condition for operation requirements for the reactor protective system (RPS) actuation circuits in Technical Specification (TS) 2.15, "Instrumentation and Control Systems."

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the information provided by the licensee and has determined that the following information is needed in order to complete its review.

1. Please provide technical information and manufacturer data for the RPS M2 contactor.
2. The current TS for FCS identifies the following operating modes:
 - a) Power Operation Condition (Operating Mode 1)
 - b) Hot Standby Condition (Operating Mode 2)
 - c) Hot Shutdown Condition (Operating Mode 3)
 - d) Cold Shutdown Condition (Operating Mode 4)
 - e) Refueling Shutdown Condition (Operating Mode 5)

To support the NRC staff review, please provide the following information:

- a) Please explain how the FCS Operating Modes line up with the Operating Modes in NUREG-1432, "Standard Technical Specifications [STSS] Combustion Engineering Plants." In particular, please explain how FCS Operating Mode 2 compares to NUREG-1432, LCO 3.3.3, "Reactor Protective System (RPS) Logic and Trip Initiation (Analog)."
- b) License Amendment Request (LAR), Enclosure 2, Section 3, "Applicability," describes the applicability for when the RPS logic and trip initiation channels are required to be operable. Please identify the FCS operating modes when the proposed LCO 2.15.2 is applicable.

3. LCO 2.15.2 states that it is applicable for FCS Operating Modes 1 and 2; and when reactor coolant temperature (Tcold) is greater than 210° F or FCS Operating Mode 4 with more than one control element assembly (CEA) rod capable of being withdrawn and RCS boron concentration less than REFUELING BORON CONCENTRATION.
 - a) Please clarify the operating modes applicable for LCO 2.15.2 using the definitions provided in FCS TS.
 - b) One of the applicable modes identified in the proposed LCO 2.15.2 is “when reactor coolant temperature (Tcold) is greater than 210° F.” Please explain if this description corresponds to FCS operating Mode 3.
 - c) NUREG-1432, STSs, identifies the applicability for LCO 3.3.3 to be STS operating Modes 1 and 2; or Modes 3, 4, and 5 with any reactor trip circuit breakers closed and any CEAs capable of being withdrawn. Please clarify how the operating modes for the proposed LCO 2.15.2 compare with this description.
4. LAR, Enclosure, Section 2.0, states that the RPS manual trip functional unit included in Table 2-2, “Instrument Operating Requirements for Reactor Protective System,” will be removed, and that this function will be included in the proposed LCO 2.15.2. The LAR Enclosure Section 3.0, Technical Evaluation, does not state that the manual function would be moved to the new LCO 2.15.2, instead this section states that requiring restoration of the inoperable channel is consistent with the current TS requirement contained in TS Table 2-2, item 1. Please clarify.
5. Current TS requirement in LCO 2.15 (2) states that if a channel of a particular system (Table 2-2) is inoperable, this channel must be placed in the tripped position. Further, if the inoperable channel has not been restored to operable status after 48 hours, the reactor should be placed in a Hot Shutdown Condition (mode 3) within the following 12 hours based on this information, it is not clear why the proposed LCO 2.15.2 (3) is requiring that with one inoperable RPS manual trip channel to restore the status to OPERABLE prior to entering Mode 2 from Mode 3. Please clarify.
6. The LAR Enclosure 2, Section 3.0, Technical Evaluation, states that the current TS 2.15(5), Alternate Shutdown and Auxiliary Feedwater Panel, will be incorporated into a new LCO 2.15.3 with the list of components being included into a new Table 2-6. Further, Section 3 states that no changes are proposed for the requirements, other than formatting. Please clarify the relationship between required actions 1 and 2 in the proposed TS 2.1.5.3.

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Sincerely,

/RA/

Lynnea E. Wilkins, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosure:
As stated

cc w/encl: Distribution via Listserv

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