

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

July 22, 2009

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 - ISSUANCE OF AMENDMENT RE: MODIFICATION OF SURVEILLANCE REQUIREMENTS FOR CONTAINMENT AIR COOLING AND FILTERING SYSTEM AND REMOVAL OF LICENSE CONDITIONS (TAC NO. ME0051)

Dear Mr. Bannister:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 260 to Renewed Facility Operating License No. DPR-40 for the Fort Calhoun Station, Unit No. 1. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated October 31, 2008.

The amendment modifies TS 3.6(3), "Containment Recirculating Air Cooling and Filtering System," by adding two new Surveillance Requirements (SRs) and modifying SRs 3.6(3)b, e and f. In addition, the amendment will remove the license conditions related to the replacement and testing of containment air cooling and filtering (CACF) unit high-efficiency particulate air filters and surveillance testing of the CACF unit relief ports. Omaha Public Power District had committed to these license conditions by letter dated April 10, 2008, and were implemented via TS Amendment No. 255 dated May 2, 2008.

A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

Alan Wang

Alan B. Wang, Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosures:

- 1. Amendment No. 260 to DPR-40
- 2. Safety Evaluation

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

OMAHA PUBLIC POWER DISTRICT

DOCKET NO. 50-285

FORT CALHOUN STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 260 Renewed License No. DPR-40

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Omaha Public Power District (the licensee), dated October 31, 2008, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

- 2. Accordingly, Renewed Facility Operating License No. DPR-40 is amended by changes as indicated in the attachment to this license amendment, and paragraph 3.B. of Renewed Facility Operating License No. DPR-40 is hereby amended to read as follows:
 - B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 260, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

In addition, paragraph 3.F. of Renewed Facility Operating License No. DPR-40 is hereby amended to read as follows:

F. Additional Conditions

The Additional Conditions contained in Appendix B, as revised through Amendment No. 260, are hereby incorporated into this license. Omaha Public Power District shall operate the facility in accordance with the Additional Conditions.

- 3. Appendix B, "Additional Conditions," to Renewed Facility Operating License DPR-40 is amended to delete license conditions (2) and (3), designated as Amendment No. 255, and to designate the existing license condition (4) for Amendment No. 257 as license condition (2).
- 4. The license amendment is effective as of its date of issuance and shall be implemented within 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Milal T. Marhly

Michael T. Markley, Chief Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment:

Changes to the Renewed Facility Operating License No. DPR-40 and Technical Specifications

Date of Issuance: July 22, 2009

ATTACHMENT TO LICENSE AMENDMENT NO. 260

RENEWED FACILITY OPERATING LICENSE NO. DPR-40

DOCKET NO. 50-285

Replace the following pages of the Renewed Facility Operating License No. DPR-40, Appendix A, Technical Specifications, and Appendix B, Additional Conditions, with the attached revised pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

License Page **REMOVE** INSERT -3--3--4--4-Appendix A, Technical Specifications REMOVE INSERT 3.6 - Page 3 3.6 - Page 3 Appendix B, Additional Conditions REMOVE INSERT Appendix B – Page 1 Appendix B - Page 1

Appendix B - Page 2

- (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form for sample analysis or instrument calibration or when associated with radioactive apparatus or components;
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by operation of the facility.
- 3. This renewed 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, Section 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and 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:

A. <u>Maximum Power Level</u>

Omaha Public Power District is authorized to operate the Fort Calhoun Station, Unit 1, at steady state reactor core power levels not in excess of 1500 megawatts thermal (rate power).

B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 260 are hereby incorporated in the license. Omaha Public Power District shall operate the facility in accordance with the Technical Specifications.

C. <u>Security and Safeguards Contingency Plans</u>

The Omaha Public Power District 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 plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Fort Calhoun Station Security Plan, Training and Qualification Plan, Safeguards Contingency Plan," submitted by letter dated May 19, 2006.

Renewed Operating License No. DPR-40 Amendment No. 260

D. Fire Protection Program

Omaha Public Power District shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Updated Safety Analysis Report for the facility and as approved in the NRC safety evaluation reports (SERs) dated February 14 and August 23, 1978; November 17, 1980; April 8 and August 12, 1982; July 3 and November 5, 1985; July 1, 1986; December 20, 1988; November 14,1990; March 17, 1993; and January 14, 1994, subject to the following provision:

Omaha Public Power District may make changes to the approved Fire Protection Program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

E. Updated Final Safety Analysis Report

The Omaha Public Power District Updated Final Safety Analysis Report supplement, submitted pursuant to 10 CFR 54.21 (d), describes certain future activities to be completed prior to the period of extended operation. The Omaha Public Power District shall complete these activities no later than August 9, 2013, and shall notify the NRC In writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement, as revised, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71 (e)(4) following issuance of this renewed license. Until that update is complete, the Omaha Public Power District may make changes to the programs and activities described in the supplement without prior Commission approval, provided that the Omaha Public Power District evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

F. Appendix B

The Additional Conditions contained in Appendix B, as revised through Amendment No. 260, are hereby incorporated into this license. Omaha Public Power District shall operate the facility in accordance with the Appendix B Additional Conditions.

> Renewed Operating License No. DPR-40 Amendment No. 260

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TECHNICAL SPECIFICATIONS

3.0 SURVEILLANCE REQUIREMENTS

- 3.6 Safety Injection and Containment Cooling Systems Tests (Continued)
 - (3) Containment Recirculating Air Cooling and Filtering System
 - a. The emergency mode dampers will be verified to be in their accident positions and the automatic valve, fan, and fusible link automatic damper operation will be checked for operability on a refueling surveillance interval.
 - b. Each fan required to function during accident conditions will be exercised monthly.
 - c. Each air filtering circuit will be operated at least 10 hours every month.
 - d. A visual examination of the HEPA and charcoal filters will be made on a refueling surveillance interval to ensure that leak paths do not exist.
 - e. Measurement of pressure drop across the HEPA filter bank shall be performed on a refueling surveillance interval to verify a pressure drop of less than 2 inches of water at system design flow. Measurement of pressure drop across the combined HEPA and charcoal adsorber banks shall be performed on a refueling surveillance interval to verify a pressure drop of less than 2.5 inches of water at system design flow.
 - f. The Containment Recirculating Air Cooling and Filtering Unit HEPA filters will be replaced at an interval not to exceed 10 years. The provisions of Technical Specification 3.0.1 do not apply.
 - g. Fans shall be shown to operate within +/-10% design flow on a refueling surveillance interval.
 - h. Containment Recirculating Air Cooling and Filtering Unit relief ports shall be exercised to verify operability on a refueling surveillance interval.

TECHNICAL SPECIFICATIONS

Appendix B-Continued

Additional Conditions

Renewed Facility Operating License No. DPR-40

Omaha Public Power District shall comply with the following conditions on the schedules noted below:

Amendment Number		Additional Conditions	Implementation Date	
181	(1)	The licensee is authorized to relocate certain technical specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these technical specification requirements to the appropriate documents, as described in the licensee's application dated November 20, 1996, as supplemented by letters dated February 20,1997, and March 25, 1997, and evaluated in the staff's safety evaluation dated March 27, 1997.	The amendment shall be implemented as of its date of issuance.	
257	(2)	 Upon implementation of Amendment No. 257 adopting TSTF-448, Revision 3, the determination of control room envelope (CRE) unfiltered air inleakage as required by TS 3.1 Table 3-3, Item 10.b. in accordance with TS 5.24c.(i), the assessment of CRE habitability as required by Specification 5.24c.(ii), and the measurement of CRE pressure as required by Specification 5.24d, shall be considered met. Following implementation: (a) The first performance of TS 3.1, Table 3-3, Item 10.b., in accordance with specification 5.24c.(i), shall be within the 	The amendment is effective as of its date of issuance and shall be implemented prior to startup from the 2008 refueling outage.	
		next 18 months as the time period since the most recent successful tracer gas test is greater than 6 years.(b) The first performance of the periodic assessment of CRE		
		habitability, Specification 5.24(c)(ii), shall be within the next 9 months as the time period since the most recent successful tracer gas test is greater than 3 years.		
		(c) The first performance of the periodic measurement of CRE pressure, Specification 5.24d., shall be within the next 138 days.		



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 260 TO RENEWED FACILITY

OPERATING LICENSE NO. DPR-40

OMAHA PUBLIC POWER DISTRICT

FORT CALHOUN STATION, UNIT NO. 1

DOCKET NO. 50-285

1.0 INTRODUCTION

By letter dated October 31, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML083080006), Omaha Public Power District (OPPD), licensee of Fort Calhoun Station (FCS), Unit 1, requested an amendment to Renewed Facility Operating License No. DPR-40. The requested amendment will remove the license conditions related to the replacement and testing of containment air cooling and filtering (CACF) unit high-efficiency particulate air (HEPA) filters and surveillance testing of the CACF unit relief ports. These license conditions were committed to in a letter from OPPD to the U.S. Nuclear Regulatory Commission (NRC) dated April 10, 2008 (ADAMS Accession No. ML081010122). These license conditions were implemented via Technical Specification (TS) Amendment No. 255 in NRC letter dated May 2, 2008 (ADAMS Accession No. ML081140017).

The requested amendment will modify TS 3.6(3), "Containment Recirculating Air Cooling and Filtering System," by changing the following surveillance requirements (SR):

- 1. SR 3.6(3)b test interval will be changed from 3 months to monthly.
- 2. SR 3.6(3)e to verify the pressure drop across the combined HEPA filter and charcoal adsorber banks in the containment air cooling and filtering system (CACFS) will be revised from an upper limit of 6 inches to an upper limit of 2.5 inches. This change provides additional margin to the current limit to ensure that adequate airflow through the cooling unit fans is maintained during accident conditions.
- 3. A new TS SR 3.6(3)f is proposed to replace the HEPA filters at an interval not to exceed 10 years and to clarify that the provisions of TS 3.0.1 do not apply.
- 4. Current SR 3.6(3)f has been renumbered to SR 3.6(3)g.
- 5. A new SR 3.6(3)h will require the CACFS Unit relief ports be exercised to verify operability on a refueling surveillance interval.

There are no physical modifications being made to FCS because of the requested changes. The requested changes are submitted for approval based on OPPD commitments made and incorporated into FCS TS Appendix B, "Additional Conditions," by TS Amendment No. 255.

2.0 REGULATORY EVALUATION

In Section 50.36 of Title 10 of the *Code of Federal Regulations* (10 CFR), "Technical specifications," the NRC established its regulatory requirements related to the content of TS. Pursuant to 10 CFR 50.36(c), TSs are required to include items in the following five specific categories related to station operation: (1) safety limits, limiting safety system settings, and limiting control settings, (2) limiting conditions for operation, (3) SRs, (4) design features, and (5) administrative controls. The rule does not specify the particular requirements to be included in a plant's TS. As stated in 10 CFR 50.36(c)(2)(i), the "[I]imiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility." The regulations in 10 CFR 50.36(c)(3) state that "[s]urveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components will be maintained within safety limits, and that the limiting conditions for operation will be met."

The NRC staff reviewed the proposed changes for compliance with 10 CFR 50.36 and agreement with the precedent as established in NUREG-1432, Revision 3, "Standard Technical Specifications, Combustion Engineering Plants" (ADAMS Accession No. ML041830597). In general, licensees cannot justify TS changes solely on the basis of adopting the model Standard Technical Specifications. To ensure this, the NRC staff makes a determination that proposed changes maintain adequate safety. Changes that result in relaxation (less restrictive condition) of current TS requirements require detailed justification.

In a memorandum dated September 18, 1992, the Commission approved the NRC staff's proposal in SECY-92-223, "Resolution of Deviations Identified During the Systematic Evaluation Program," not to apply 10 CFR Part 50, Appendix A, "General Design Criteria for Nuclear Power Plants," to plants with construction permits prior to May 21, 1971 (ADAMS Legacy Library Accession No. 9210060362). FCS was licensed for construction prior to May 21, 1971, and at that time committed to the draft General Design Criteria (GDC). The draft GDC, which are similar to Appendix A, "General Design Criteria for Nuclear Power Plants," in 10 CFR Part 50, are contained in Appendix G, "Response to 70 Criteria," of the FCS Updated Safety Analysis Report (USAR).

In its letter dated October 31, 2008, the licensee appropriately identified the following draft GDC as specified in Appendix G to the FCS USAR:

Criterion 10 – *Containment.* FCS Criterion 10 states, "... The containment structure shall be designed to sustain the initial effects of gross equipment failures, such as a large coolant boundary break, without loss of required integrity and, together with other engineered safety features as may be necessary, to retain for as long as the situation requires the functional capability to protect the public."

Criterion 37 – Engineered Safety Features Basis for Design. FCS Criterion 37 states, "Engineered safety features shall be provided in the facility to back up the safety provided by the core design, the reactor coolant pressure boundary, and their protection systems. As a minimum, such engineered safety features shall be designed to cope with any size reactor coolant pressure boundary break up to and including the circumferential rupture of any pipe in that boundary assuming unobstructed discharge from both ends."

Criterion 38 – *Reliability and Testability of Engineered Safety Features.* FCS Criterion 38 states, "All engineered safety features shall be designed to provide high functional reliability and ready testability. In determining the suitability of a facility for a proposed site, the degree of reliance upon and acceptance of the inherent and engineered safety afforded by the systems, including engineered safety features, will be influenced by the known and the demonstrated performance capability and reliability of the systems, and by the extent to which the operability of such systems can be tested and inspected where appropriate during the life of the plant."

Criterion 41 – Engineered Safety Features Performance Capability. FCS Criterion 41 states, "Engineered safety features such as emergency core cooling and containment heat removal systems shall provide sufficient performance capability to accommodate partial loss of installed capacity and still fulfill the required safety function. As a minimum, each engineered safety feature shall provide this required safety function assuming a failure of a single active component."

Criterion 42 – *Engineered Safety Features Components Capability*. FCS Criterion 42 states, "Engineered safety features shall be designed so that the capability of each component and system to perform its required function is not impaired by the effects of a loss-of-coolant accident."

Criterion 43 – Accident Aggravation Prevention. FCS Criterion 43 states, "Engineered safety features shall be designed so that any action of the engineered safety features which might accentuate the adverse after-effects of the loss of normal cooling is avoided."

Criterion 52 – *Containment Heat Removal Systems.* FCS Criterion 52 states, "Where active heat removal systems are needed under accident conditions to prevent exceeding containment design pressure, at least two systems, preferably of different principles, each with full capacity, shall be provided."

Criterion 58 – *Inspection of Containment Pressure-Reducing Systems*. FCS Criterion 58 states, "Design provisions shall be made to facilitate the periodic physical inspection of all important components of the containment pressure-reducing systems, such as pumps, valves, spray nozzles, torus, and sumps."

Criterion 59 – *Testing of Containment Pressure-Reducing Systems*. FCS Criterion 59 states, "The containment pressure reducing systems shall be designed so that active components, such as pumps and valves, can be tested periodically for operability and required functional performance."

Criterion 61 – *Testing of Operations Sequence of Containment Pressure-Reducing Systems.* FCS Criterion 61 states, "A capability shall be provided to test under conditions as close to the design as practical the full operational sequence that would bring the containment pressure-reducing systems into action, including the transfer to alternate power sources."

Criterion 62 – *Inspection of Air Clean-Up Systems*. FCS Criterion 62 states, "Design provisions shall be made to facilitate physical inspection of all critical parts of containment air cleanup systems, such as ducts, filters, fans and dampers."

Criterion 63 – *Testing of Air Cleanup Systems Components*. FCS Criterion 63 states, "Design provisions shall be made so that active components of the air cleanup systems, such as fans and dampers, can be tested periodically for operability and required functional performance."

Criterion 64 – *Testing of Air Cleanup Systems*. FCS Criterion 64 states, "A capability shall be provided for in situ periodic testing and surveillance of the air cleanup systems to ensure (a) filter bypass paths have not developed and (b) filter and trapping materials have not deteriorated beyond acceptable limits."

Criterion 65 – *Testing of Operational Sequence of Air Cleanup System.* FCS Criterion 65 states, "A capability shall be provided to test under conditions as close to design as practical the full operational sequence that would bring the air cleanup systems into action, including the transfer to alternate power sources and the design air flow delivery capability."

3.0 TECHNICAL EVALUATION

3.1 System Description

In its letter dated October 31, 2008, the licensee states:

The CACFS consists of four air handling units, each with its own fan, a common plenum discharge system and instrumentation and controls. There are two types of units: (1) two containment air cooling and filtering (CACF) units with filtering capacity and (2) two containment air cooling (CAC) units without filtering capacity. Each train of the two-train CACFS consists of one CACF unit and one CAC unit. The arrangement of the equipment is shown in USAR Figure 6.4-1.

Each of the two CACF units is comprised of the following components (listed in order of flow sequence): inlet face dampers, baffle type moisture separators,

media type mist eliminators, HEPA filters, charcoal filters [adsorbers] and cooling coils, all contained in a single housing. The CAC units are similar in design but lack mist eliminators, face and bypass dampers, HEPA and charcoal filters.

Prior to TS Amendment No. 255 (Reference 6.3), dampers between the charcoal filters and the cooling coils in the CACF units allowed the filter banks to be bypassed during normal (i.e., non-accident) operation. However, in accordance with TS Amendment No. 255, these dampers were permanently placed into their accident positions during the 2008 RFO [refueling outage], which causes the CACFS to operate in filtered air mode at all times. The filter banks of each unit are split in two parallel and separate trains. The common exhaust flows from each train are drawn through coil banks by axial, air-over-motor fans and discharged into a plenum. Back draft dampers are installed in the duct sections down stream of the fans.

3.2 Proposed Technical Specification Changes

The license amendment request (LAR) stated that the licensee proposes to modify three SRs: one frequency change (TS 3.6(3)b); one combined pressure drop change (TS 3.6(3)e); and one administrative renumbering change (TS 3.6(3)g). The licensee also proposes to add two new surveillances: HEPA filter replacement (TS 3.6(3)f) and exercising the relief ports (TS 3.6(3)h). Additionally, Appendix B, "Additional Conditions," is revised to remove license conditions (2) and (3) that were completed during the 2008 RFO as well as the associated LAR submittal items, and renumber current additional condition (4), related to Amendment No. 257, for accuracy.

The licensee plans to revise the response to USAR Appendix G, Criterion 64 and the Bases of TS 3.6 to reflect testing of the CACFS. The USAR Appendix G and TS 3.6 Bases changes are provided for information only in support of the proposed amendment. The NRC staff has no objection to the proposed TS Bases.

3.3 Evaluation

The objective of TS Section 3.6(3) is to verify that the Containment Recirculating Air Cooling and Filtering System will respond promptly and perform its intended functions, if required.

3.3.1 <u>TS SR 3.6(3)b</u>

The licensee is proposing to revise the existing surveillance interval in TS 3.6(3)b for the CACFS fans from "not to exceed three months" to "monthly" which is consistent with the surveillance test frequency delineated in NUREG-1432, Revision 3.

Current TS SR 3.6(3)b states:

Each fan required to function during accident conditions will be exercised at intervals not to exceed three months.

Revised TS SR 3.6(3)b would state:

Each fan required to function during accident conditions will be exercised monthly.

The NRC staff concludes that the proposed change meets the requirements of 10 CFR 50.36(c)(3), is more conservative than the current TS, and is consistent with the SRs for standby systems as stated in the Bases of NUREG-1432, Revision 3, which has been reviewed and approved previously by the NRC staff and, therefore, is acceptable.

3.3.2 <u>TS SR 3.6(3)e</u>

The SR limit for the combined pressure drop across the HEPA filters and charcoal adsorbers will change from 6 inches to 2.5 inches. The licensee stated that the proposed change related to the pressure drop is specifically across the combined HEPA and charcoal adsorbers. The existing pressure drop limit across the combined HEPA and charcoal filters is 6 inches of water. An analysis of the performance of the CACFS with HEPA filter loading was performed. The estimated pressure drop used in the analysis across the charcoal adsorber has a limit of 0.5 inches. The estimated pressure drop used in the analysis across the combined HEPA filters is 2 inches (current TS limit). Therefore, the limit across the combined HEPA filters and charcoal adsorbers should be a pressure drop of 2.5 inches rather than 6 inches. The proposed change will ensure that adequate airflow through the cooling unit fans is maintained during normal operations and accident conditions.

Current TS SR 3.6(3)e states:

Measurement of pressure drop across the HEPA filter bank shall be performed on a refueling surveillance interval to verify a pressure drop of less than 2 inches of water at system design flow. Measurement of pressure drop across the combined HEPA and charcoal adsorber banks shall be performed on a refueling surveillance interval to verify a pressure drop of less than 6 inches of water at system design flow.

Revised TS SR 3.6(3)e would state:

Measurement of pressure drop across the HEPA filter bank shall be performed on a refueling surveillance interval to verify a pressure drop of less than 2 inches of water at system design flow. Measurement of pressure drop across the combined HEPA and charcoal adsorber banks shall be performed on a refueling surveillance interval to verify a pressure drop of less than 2.5 inches of water at system design flow.

The NRC staff concludes that the proposed change continues to meet the requirements of 10 CFR 50.36(c)(3) and is conservative as it provides additional margin to the current limit to ensure that adequate airflow through the cooling unit fans is maintained during normal operations and accident conditions and, therefore, is acceptable.

3.3.3 TS SR 3.6(3)f

Current TS 3.6(3)f is renumbered to TS 3.6(3)g but is otherwise unchanged. The NRC staff concludes that this change is editorial in nature, has no affect on the operation of the system, and the TS continues to meet the requirements of 10 CFR 50.36(c)(3) and therefore, is acceptable.

3.3.4 New TS SR 3.6(3)f

A new SR TS 3.6(3)f is proposed for the periodic replacement of the CACFS HEPA filters.

In its letter dates October 31, 2008, the licensee stated that American Nuclear Standards Institute (ANSI) N510-1975 identifies a 5-year filter replacement interval. The licensee also stated that more current tests (American Society of Mechanical Engineers (ASME) AG-1 Nonmandatory Appendix FK-A; draft) show that the filters can have a longer replacement interval when operated in a dry atmosphere. TS SR 3.6(3)f proposes replacement of the HEPA filters at an interval not to exceed 10 years based on the more current ASME testing. The licensee also stated that the provisions of TS 3.0.1 do not apply to the proposed 10-year frequency. In its letter dated October 31, 2008, the licensee stated that, "Operating experience also supports the 10-year frequency as OPPD has historically operated the plant with dampers aligned to draw air through the filters continuously without exceeding the allowable limits or experiencing filter deterioration."

New TS SR 3.6(3)f would state:

The Containment Recirculating Air Cooling and Filtering Unit HEPA filters will be replaced at an interval not to exceed 10 years. The provisions of Technical Specification 3.0.1 do not apply.

The NRC staff reviewed the new SR and concluded that it meets the requirements of 10 CFR 50.36(c)(3). The NRC staff concludes that the operating experience and more current tests provide sufficient basis for extending the filter replacement interval beyond the standard provided in ANSI N510-1975, therefore, the proposed 10-year filter replacement interval is acceptable.

3.3.5 New TS SR 3.6(3)h

The licensee stated that TS SR 3.6(3)h is added to verify that the relief ports on the CACFS are operational. This new SR will exercise the CACFS relief ports on a refueling surveillance interval to verify that they open manually and close with gravity. The CACFS housing contains relief ports designed to open in case of a rapid increase in pressure, which protects the housing from failure or collapse during the event.

New TS SR 3.6(3)h would state:

Containment Recirculating Air Cooling and Filtering Unit relief ports shall be exercised to verify operability on a refueling surveillance interval.

In its letter dated October 31, 2008, the licensee stated that exercising the relief ports is performed during the conduct of surveillance test SE-ST-VA-0011, "Containment Recirculating Air Cooling and Filtering Damper Refueling Operability Test." The NRC staff concludes that exercising the relief ports on a refueling surveillance interval is adequate to demonstrate their operability and, therefore, is acceptable.

The licensee stated that Appendix B, "Additional Conditions," is revised to remove license conditions (2) and (3) associated with TS Amendment No. 255. As a result, license condition (4) associated with TS Amendment No. 257, which is scheduled to be implemented in March 2009, will be renumbered as (2). This is acceptable because the conditions (2) and (3) were completed during the 2008 RFO.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Nebraska State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding published in the *Federal Register* on April 7, 2009 (74 FR 15773). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: H. Walker

Date: July 22, 2009

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 - ISSUANCE OF AMENDMENT RE: MODIFICATION OF SURVEILLANCE REQUIREMENTS FOR CONTAINMENT AIR COOLING AND FILTERING SYSTEM AND REMOVAL OF LICENSE CONDITIONS (TAC NO. ME0051)

Dear Mr. Bannister:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 260 to Renewed Facility Operating License No. DPR-40 for the Fort Calhoun Station, Unit No. 1. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated October 31, 2008.

The amendment modifies TS 3.6(3), "Containment Recirculating Air Cooling and Filtering System," by adding two new Surveillance Requirements (SRs) and modifying SRs 3.6(3)b, e and f. In addition, the amendment will remove the license conditions related to the replacement and testing of containment air cooling and filtering (CACF) unit high-efficiency particulate air filters and surveillance testing of the CACF unit relief ports. Omaha Public Power District had committed to these license conditions by letter dated April 10, 2008, and were implemented via TS Amendment No. 255 dated May 2, 2008.

A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

/ra/

Alan B. Wang, Project Manager Plant Licensing Branch IV Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-285 Enclosures: 1. Amendment No. 260 to DPR-40 2. Safety Evaluation										
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