May 9, 2007

Mr. Charles D. Naslund
Senior Vice President and Chief Nuclear Officer
Union Electric Company
Post Office Box 620
Fulton, MO 65251

SUBJECT: CALLAWAY PLANT, UNIT 1 - ISSUANCE OF AMENDMENT RE: CONTROL ROOM EMERGENCY VENTILATION SYSTEM AND AIR CONDITIONING SYSTEM (TAC NOS. MD2391 AND MD2392)

Dear Mr. Naslund:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 184 to Facility Operating License No. NPF-30 for the Callaway Plant, Unit 1. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated June 7, 2006 (ULNRC-05301).

The amendment deletes Required Action D.1.2 in TS 3.7.10, “Control Room Emergency Ventilation System (CREVS),” and Required Action C.1.2 in TS 3.7.11, “Control Room Air Conditioning System (CRACS).” For TS 3.7.13, “Emergency Exhaust System (EES),” the amendment also deletes the phrase “in MODE 1, 2, 3, or 4” from Condition A (one EES train inoperable) and revises Condition D to state the following: “Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the fuel building.”

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/

Jack Donohew, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosures: 1. Amendment No. 184 to NPF-30
2. Safety Evaluation

cc w/encls: See next page

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UNION ELECTRIC COMPANY

CALLAWAY PLANT, UNIT 1

DOCKET NO. 50-483

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 184
License No. NPF-30

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Union Electric Company (UE, the licensee), dated June 7, 2006, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's 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 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, the license is amended by changes to the Technical Specifications and paragraph 2.C.(2) of Facility Operating License No. NPF-30 as indicated in the attachment to this license amendment.

3. This amendment is effective as of its date of issuance, and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Thomas G. Hiltz, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility
Operating License and
Technical Specifications

Date of Issuance: May 9, 2007

ATTACHMENT TO LICENSE AMENDMENT NO. 184

FACILITY OPERATING LICENSE NO. NPF-30

DOCKET NO. 50-483

Replace the following pages of the Facility Operating License No. NPF-30 and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Operating License

REMOVE	INSERT
-3-	-3-

Technical Specifications

REMOVE	INSERT
3.7-26	3.7-26
3.7-29	3.7-29
3.7-32	3.7-32
3.7-33	3.7-33

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 184 TO FACILITY OPERATING LICENSE NO. NPF-30

UNION ELECTRIC COMPANY

CALLAWAY PLANT, UNIT 1

DOCKET NO. 50-483

1.0 INTRODUCTION

By application dated June 7, 2006 (Agencywide Documents Access and Management System Accession No. ML061710576), Union Electric Company (the licensee) requested changes to Facility Operating License No. NPF-30 for the Callaway Plant, Unit 1 (Callaway). The licensee proposed to change the Technical Specifications (TSs) to delete Required Action D.1.2 in Technical Specification (TS) 3.7.10, "Control Room Emergency Ventilation System (CREVS)," and Required Action C.1.2 in TS 3.7.11, "Control Room Air Conditioning System (CRACS)." These required actions are for the condition where the required actions and completion time (CT) of TS 3.7.10, Condition A (one CREVS train inoperable), and TS 3.7.11, Condition A (one CRACS train inoperable), are not met in Modes 5 or 6, or during movement of irradiated fuel assemblies. The deleted required actions, and associated CTs, are to verify the operable CREVS (or CRACS) train is capable of being powered by an emergency power source. For TS 3.7.13, "Emergency Exhaust System (EES)," the licensee also proposed to delete the phrase "in MODE 1, 2, 3, or 4" from Condition A (one EES train inoperable) and revise Condition D to state the following: "Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the fuel building."

In Attachments 4 and 5 to its application, respectively, the licensee identified changes to the TS Bases and to the Final Safety Analysis Report (FSAR) that are related to its proposed amendment. The licensee did not request that the NRC staff approve these changes. Changes by the licensee to its TS Bases and to the FSAR are controlled by TS 5.5.14, "Technical Specifications (TS) Bases Control Program," and by 10 CFR 50.59, "Changes, tests, and experiments," respectively.

2.0 REGULATORY EVALUATION

In Section 50.36 of Title 10 of the *Code of Federal Regulations* (10 CFR 50.36), the Commission established its regulatory requirements related to the content of the TSs. Pursuant to 10 CFR 50.36, 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 (LCOs); (3) surveillance requirements; (4) design features; and (5) administrative controls. The rule does not specify the particular requirements to be included in a plant's TSs.

As stated in 10 CFR 50.36(c)(2)(i), the “[l]imiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications ...” The remedial actions in the TSs are specified in terms of LCO conditions, required actions, and CTs to complete the required actions. When an LCO is not being met, the CTs specified in the TSs are the time allowed in the TSs for completing the specified required actions. The conditions and required actions specified in the TSs must be acceptable remedial actions for the LCO not being met, and the CTs must be a reasonable time for completing the required actions while maintaining the safe operation of the plant.

As explained in Generic Letter 80-30, "Clarification Of The Term 'Operable' As It Applies To Single Failure Criterion For Safety Systems Required By TS," dated April 10, 1980, plant TSs are formulated to preserve the single-failure criterion (discussed below) for structures, systems, or components (SSCs) described in the Callaway FSAR (i.e., the NRC-approved plant design basis) that are relied upon in the design-basis accident (DBA) analyses. By and large, the single-failure criterion is preserved by specifying LCOs that require all redundant components of safety-related systems to be operable. When the required redundancy is not maintained, either due to equipment failure or a maintenance outage, the TSs require an action to be taken with a CT, which is a temporary relaxation of the single-failure criterion in that the specified CT allows a plant to operate with inoperable safety-related equipment (i.e., the single-failure criterion not being met) before the plant may have to shut down. The specified CT provides a limited time, consistent with overall system reliability and risk considerations, to fix the equipment or otherwise make it operable. Therefore, when an SSC is in a condition, required action, and CT in the TSs, the single-failure criterion is not being met.

The conditions and required actions specified for each LCO provide the remedial actions required by 10 CFR 50.36(c)(2)(i) when the LCO is not being met. They address single outages of components, trains, or subsystems for the SSCs that are addressed by LCOs. Because the TSs do not address every subcomponent and attendant equipment that make up the SSCs in the LCOs for the SSCs to perform their safety functions, the TSs also have the definition of operable, which states the following:

> A system, subsystem, train, component, or device shall be operable or have operability when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication and other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s).

The single-failure criterion for nuclear power plants is the design requirement, for safety-related SSCs used to mitigate abnormal operational occurrences and DBAs, that there is sufficient redundancy in components and features in the SSC such that the safety function(s) for any such SSC can be accomplished assuming any single failure of a component or feature in the SSC. The single-failure criterion is defined in Appendix A, "General Design Criteria [GDC] for Nuclear Power Plants," of 10 CFR Part 50, and stated in GDC 17, 34, 35, 38, 41, and 44. Plants are designed and licensed to meet the single-failure criterion. Plants are normally

operated with the requirement that the single-failure criterion is being met in that the TSs contain LCOs that require that all necessary SSCs, which meet the four criteria in 10 CFR 50.36(c)(2)(ii), are operable. However, as explained above, the TSs allow equipment to be inoperable (i.e., the single-failure criterion is not being met) for periods of time (i.e., the CTs) without requiring the plants to shut down. The plant design and licensing basis applies to how the plant was designed and licensed as described in the FSAR; the TSs applies to whether the SSCs and the attendant equipment for the SSCs are operable (i.e., no equipment is assumed to be inoperable to determine if an LCO is being met, and what condition, required action, and CT the plant is in) and CTs are specified for how long equipment may be inoperable before required actions must be completed.

Given that the design and safety function(s) of the CREVS and the CRACS are not being changed by the proposed amendment, there are no applicable GDC related to the design and safety function of these systems for this amendment.

3.0 BACKGROUND

In its application, the licensee stated that the amendment request involves changes to the TSs for the control room ventilation system, the control room air-conditioning system, and the emergency exhaust system, which serves both the auxiliary and fuel buildings during accidents. The proposed changes are with respect to the requirements that are applicable during plant shutdown conditions, when there may be movement of irradiated fuel assemblies.

As described in the TS 3.7.10 Bases, the CREVS provides a protected environment to the unit operators in the control room so that the operators are able to control the unit without excessive radiation exposure following an uncontrolled release of radioactivity within the plant. The CREVS consists of two independent, redundant trains that pressurize, recirculate, and filter the control room air, and each train consists of a filtration system train and a pressurization system train. The CREVS is designed to maintain the control room environment for 30 days of continuous occupancy after a DBA without exceeding the GDC 19 criteria of 5 rem total effective dose equivalent (TEDE) to the control room operators. The CREVS is required to be operable in Modes 1, 2, 3, 4, 5, and 6, and during movement of irradiated fuel assemblies. In Modes 1, 2, 3, and 4, the CREVS is to control operator exposure during and following a loss-of-coolant accident (LOCA) or a steam generator tube rupture accident. In Mode 5 and 6, the CREVS is required to cope with the design-basis release from the rupture of a waste gas decay tank. In Mode 6 and during movement of irradiated fuel assemblies, the CREVS is required to cope with the release from the design-basis fuel handling accident (FHA) inside containment or in the fuel building.

The CRACS provides temperature control for the control room and consists of two independent and redundant trains that provide cooling of recirculated control room air. The CRACS is a subsystem to the CREVS, described above providing the air temperature control for the control room for accidents. The CRACS is an emergency system, which also operates during normal unit operations. In Modes 1, 2, 3, 4, 5, and 6, and during movement of irradiated fuel assemblies, the CRACS is required to be operable to ensure that the control room temperature will not exceed equipment operational requirements during accidents.

The EES is a filter ventilation system that serves both the auxiliary building and the fuel building. Following a safety injection signal (SIS), safety-related dampers isolate the auxiliary building, and the EES exhausts and filters potentially contaminated air due to leakage of radioactive water into the auxiliary building from the emergency core cooling systems (ECCS). The EES also filters airborne radioactive particulates from the area of the spent fuel pool in the fuel building following an FHA. In this mode, the EES would collect and filter the airborne radioactivity released to the fuel building. It consists of two independent and redundant trains, and is on standby for an automatic start following receipt of a fuel building ventilation isolation signal (FBVIS) or an SIS. Initiation of the SIS mode of operation would take precedence over any other mode of operation of the EES and, in the SIS mode, the system is aligned to exhaust the auxiliary building.

For the EES, upon receipt of an FBVIS generated by gaseous radioactivity monitors in the fuel building exhaust line, normal air discharges from the building are terminated, the fuel building is isolated, the stream of ventilation air discharges through the system filter trains, and a control room ventilation isolation signal (CRVIS) is generated. The CRVIS initiates the actuation of the CREVS and places the CREVS in the emergency mode of operation, which (1) closes the unfiltered outside air intake and unfiltered exhaust dampers, and aligns the system for recirculation of the control room air through the redundant trains of high-efficiency particulate air and the charcoal filters, and (2) initiates pressurization and filtered ventilation of the air supply to the control room. The CRACS, being a subsystem to the CREVS, would thus also be initiated by the CRVIS.

The EES may be used for normal, as well as post-accident, atmospheric cleanup functions and is involved in the following DBAs: the LOCA and FHA. In Mode 1, 2, 3, or 4, the two-train EES is required to be Operable to support the SIS mode of operation to provide fission product removal associated with ECCS leaks due to a LOCA and leakage from containment and annulus. In Mode 5 or 6, the EES is not required to be operable since the ECCS is not required to be operable. During movement of irradiated fuel in the fuel building, the EES is required to be operable to support the FBVIS mode of operation to alleviate the consequences of an FHA. These modes of applicability for TS 3.7.13 are modified by a note in the specified applicability for LCO 3.7.13 that states the applicability for the two safety-related EES modes of operation (i.e., the SIS and FBVIS modes of operation). For the SIS mode, which aligns the system to the auxiliary building to collect ECCS leakage, the system is required only in Modes 1, 2, 3, and 4, because it is required only when the ECCS is required to be operable. For the FBVIS mode, when the system is aligned to the fuel building, this mode is only applicable during the movement of irradiated fuel assemblies in the fuel building. It is the fuel building that contains the spent fuel pool. This note for LCO 3.7.13 is not being changed in this amendment and will continue to state the following: “The SIS mode of operation is required in Modes 1, 2, 3, and 4. The FBVIS mode of operation is required only during the movement of irradiated fuel assemblies in the fuel building.”

4.0 TECHNICAL EVALUATION

In its application, the licensee proposed the following changes to the remedial actions for TSs 3.7.10, 3.7.11, and 3.7.13:

1. For TS 3.7.10, Condition D, delete Required Action D.1.2 to verify that the operable CREVS train is capable of being powered by an emergency power source. The associated CT for this required action would also be deleted. The Required Action D.1.1 would be re-numbered Required Action D.1, but would not otherwise be changed. Condition D is when the required action and associated CT of Condition A, one CREVS train is inoperable in Modes 1 through 6 or during movement of irradiated fuel assemblies, is not met.

2. For TS 3.7.11, Condition C, delete Required Action C.1.2 to verify that the operable CRACS train is capable of being powered by an emergency power source. The associated CT for this required action would also be deleted. The Required Action C.1.1 would be re-numbered Required Action C.1, but would not otherwise be changed. Condition C is when the required action and associated CT of Condition A, one CRACS train is inoperable in Modes 1 through 6 or during movement of irradiated fuel assemblies, is not met.

3. For TS 3.7.13, Condition A would be revised to delete the phrase “in MODE 1, 2, 3, or 4” from the current statement: “One EES train inoperable in MODE 1, 2, 3, or 4.” The revised Condition A would be “One EES train inoperable.”

4. For TS 3.7.13, in addition the current Condition D for “[O]ne EES train inoperable during movement of irradiated fuel assemblies in the fuel building” would be replaced by the following: “Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the fuel building.” The required actions and associated CTs for Condition D would not be changed.

4.1 Justification for Deletion of Required Actions D.1.2 (CREVS) and C.1.2 (CRACS)

In its application, the licensee stated that the current Required Actions D.1.2 and C.1.2 in TSs 3.7.10 and 3.7.11, respectively, are overly restrictive with respect to the requirements in TS 3.8.2, “AC Sources - Shutdown,” for emergency alternating current (AC) electrical power sources for shutdown conditions. LCO 3.8.2 requires that the following AC electrical power sources shall be operable in Modes 5 and 6:

1. One qualified circuit between the offsite transmission network and the onsite Class 1E AC electrical power distribution subsystem required by LCO 3.8.10, "Distribution Systems - Shutdown"; and

2. One diesel generator (DG) capable of supplying one train of the onsite Class 1E AC electrical power distribution subsystems required by LCO 3.8.10.

The Required Actions D.1.2 and C.1.2 for one CREVS or CRACS train inoperable, where the train has not been restored to operable status within the CT of 7 days (for CREVS) or 30 days (for CRACS), the licensee is required to either:

1. By Required Actions D.1 (CREVS) or C.1 (CRACS), place the operable CREVS (or CRACS) train in the emergency mode of operation immediately and verify that the operable CREVS or CRACS train is capable of being powered by an emergency power source, or

2. By Required Actions D.2 (CREVS) or C.2 (CRACS), suspend core alterations and movement of irradiated fuel assemblies.

Although normally powered from offsite power, each of the two CREVS and CRACS trains can be powered from separate emergency power sources, or DGs because there are two redundant DGs at the plant. Therefore, as the licensee explains, the Required Action D.2.2 (CREVS) or Required Action C.2.2 (CRACS) in effect requires that there be two DGs available (i.e., operable) because these required actions specify that the operable CREVS or CRACS train must be capable of being powered by its emergency power source, or DG. Since either of the two CREVS or CRACS trains may be inoperable and the other operable train would have to be capable of being powered by the DG for that operable CREVS or CRACS train. To do this, the DG for the operable CREVS or CRACS train must also be operable.

This situation applies only to Modes 5 and 6 because the modes of applicability for TSs 3.7.10 and 3.7.11 are Modes 5 and 6. However, LCO 3.8.2, “AC Sources - Shutdown,” only requires one DG to be operable in Modes 5 and 6. In Modes 1, 2, 3, and 4, both DGs are required to be operable and capable of supplying power to the onsite Class 1E power distribution subsystem(s) in accordance with LCO 3.8.1, “AC Sources - Operating.”

Modes of Applicability for Remedial Actions

The modes of applicability for TSs 3.7.10 and 3.7.11 are Modes 1 through 6 and during movement of irradiated fuel assemblies. Modes 1 through 6 are defined in TS Table 1.1-1 in terms of the reactor core, and Mode 6 would exist even though all the fuel assemblies may be removed from the core during the refueling outage. The movement of irradiated fuel assemblies is a separate mode of applicability that would exist in addition to Mode 1, 2, 3, 4, 5, or 6. In terms of TSs 3.7.10 and 3.7.11, the licensee could be in Mode 1, 2, 3, or 4, and moving an irradiated fuel assembly in the spent fuel pool. The licensee would be in both Mode 1, 2, 3, or 4, and the movement of irradiated fuel assemblies. If one CREVS (or CRACS) train was inoperable, the licensee would be in Condition A (CREVS or CRACS) for one train inoperable, and, if this train was inoperable for more than 7 days (CREVS), or 30 days (CRACS), then the licensee would enter the following two conditions:

1. For CREVS, Condition C for Mode 1, 2, 3, or 4, and Condition D for the movement of irradiated fuel assemblies, and

2. For CRACS, Condition B for Mode 1, 2, 3, or 4, and Condition C for the movement of irradiated fuel assemblies.

The licensee would have to meet the required actions for both conditions.

As explained earlier in this section, LCO 3.8.2 only requires one DG to be operable in Modes 5 and 6. Therefore, removing Required Actions D.1.2 (CREVS) and C.1.2 (CRACS) when there is movement of irradiated fuel assemblies in Modes 5 and 6 is consistent with LCO 3.8.2 requiring only one DG to be operable. However, movement of irradiated fuel assemblies could occur in Modes 1 through 4. For these modes, LCO 3.8.1, not LCO 3.8.2, is the applicable LCO for AC power sources, and LCO 3.8.1 requires both DGs to be operable in Modes 1 through 4. Therefore, when there is movement of irradiated fuel assemblies in Modes 1 through 4, LCO 3.8.1 requires that both DGs must be operable despite the removal of Required Actions D.1.2 (CREVS) and C.1.2 (CRACS).

In the case of the licensee being in Mode 5 or 6, and in the movement of irradiated fuel assemblies, and with one inoperable CREVS or CRACS train for more than 7 days (CREVS) or 30 days (CRACS), the licensee would only be in Condition D (CREVS) or Condition C (CRACS).

Removing Assumption of Loss of Offsite Power in Modes 5 and 6

In its application, the licensee stated that in conjunction to the proposed changes to TSs 3.7.10 and 3.7.11 it would also make a change to Section 3.1.2, “Additional Single Failure Assumptions,” of the FSAR, which provides a general description of what assumptions are made in the accident analyses for the design-basis postulated accidents. The licensee implied that the reason the Required Actions D.1.2 (CREVS) and C.1.2 (CRACS) were overly restrictive relative to the provisions in TS 3.8.2 for Modes 5 and 6 for the number of DGs required to be operable was due to the assumptions listed in Section 3.1.2 of the FSAR. The licensee stated (1) that the basis of the provisions in TS 3.8.2 is that “it is not necessary to postulate a single failure concurrent with a loss of all offsite power” and (2) that it intended to add such a statement to Section 3.1.2 of the FSAR.

In Section 3.1.2 of the FSAR, the licensee states that, in designing and analyzing for the design-basis LOCA, main steam line break, FHA, and SGTR, one of its assumptions (i.e., Item e.) for these accidents, in addition to postulating the initiating event, is the following:

e. All offsite power is simultaneously lost and is restored within 7 days.

By Attachment 5 to its application, the licensee has identified that, if this amendment is approved, it intends to revise the above assumption Item e. to add an exception as follows:

e. All offsite power is simultaneously lost and is restored within 7 days [except that for events postulated to occur during cold shutdown conditions (e.g., a fuel handling accident) a single failure concurrent with a loss of all offsite power is not required to be assumed].

The exception to Item e. is the underlined text given above. Item b in FSAR Section 3.2.1 is the list of assumptions that are to be made for a single failure in addition to the initiating event in the accident. To the NRC staff, the statement that "except that for events postulated to occur during cold shutdown conditions (e.g., a fuel handling accident) a single failure concurrent with a loss of all offsite power is not required to be assumed" is confusing because, in referring to when a single failure is not assumed, the statement appears to be in conflict with the single-failure criterion stated in Section 2.0 of this SE, which requires that a single failure must always be assumed in a DBA.

In the call on April 11, 2007, when questioned about the exception, the licensee explained that it had meant that the loss of offsite power would not be assumed in a DBA in Mode 5 or 6 (cold shutdown) in addition to an assumed single failure for the accident. This is the same reason stated by the licensee in its application that the current Required Actions D.1.2 (CREVS) and C.1.2 (CRACS) are in conflict with LCO 3.8.2, which requires only one DG to be operable in Modes 5 and 6. LCO 3.8.2 is not based on a loss of offsite power during any DBA in Modes 5 and 6 because only one DG is required to be operable in these modes. If a loss of offsite power had to be assumed, then LCO 3.8.2 would require both DGs to be operable in Modes 5 and 6.

Based on the above discussion with the licensee, the NRC staff believes a better statement of the exception being made by the licensee is the following: except that for events postulated to occur during Mode 5 or 6 cold shutdown conditions (e.g., a fuel handling accident) a loss of all offsite power is not required to be assumed in addition to a single failure. This statement clarifies that the exception applies to Modes 5 and 6, that it is the loss of offsite power that may not be assumed in the accident, and that the single failure will always be assumed. This exception means that in Modes 5 and 6, what the licensee calls the cold shutdown modes, in a postulated DBA, the loss of all offsite power is not required to be assumed when there is a single failure (i.e., in this case, the inoperable CREVS or CRACS train).

As discussed in Section 2.0 of this safety evaluation (SE), the TSs are written to enforce the single-failure criterion in that the LCOs require the safety-related systems to be operable. When these systems are operable, the single-failure criterion is being met; however, with the loss of a system train (i.e., the train is inoperable), the single-failure criterion is not being met for that system and the TSs specify the remedial action (i.e., the required actions and CTs) to be taken by the licensee before the plant is required to be a safe condition not requiring the system to be operable.

For the CREVS and CRACS, the Required Actions D.1.2 (CREVS) and C.1.2 (CRACS) are for the condition where one CREVS (or one CRACS) train is inoperable. With the proposed exception, the licensee is stating that it proposes not to also assume that concurrent with this condition there could be a loss of offsite power. In other words, with one CREVS or CRACS train inoperable and a postulated DBA for Mode 5 or 6, the licensee will not assume that there could be also a concurrent loss of offsite power.

The DBAs for Modes 5 and 6 are the FHA, the waste gas system failure, and a release due to a liquid-containing tank failure. The FHA, the bounding accident for control room exposures and the licensee's analysis of the FHA for Modes 5 and 6, is addressed in Section 15.7.4 of the FSAR and does not include the loss of offsite power. The licensee asserts, and the NRC staff

agrees, that for the FHA in shutdown conditions (Modes 5 and 6) it is not required to postulate a loss of offsite power concurrent with the assumed single failure in the CREVS (or CRACS). Based on this, the NRC staff concludes that the licensee is not required to assume the loss of offsite power with the FHA in Modes 5 and 6 and, therefore, the remedial actions in Required Actions D.1.2 (CREVS) and C.1.2 (CRACS) which in effect require both DGs to be operable in Modes 5 and 6 go beyond what is required for the safe operation of the plant in Modes 5 and 6.

Conclusions for Proposed TSs 3.7.10 and 3.7.11 Changes

With no requirement for a loss of offsite power to be assumed concurrent with the single failure, then there is no need to require the verification that the operable CREVS (or CRACS) unit train is capable of being powered from its DG. The operable train could be powered from offsite power if it is needed to mitigate an accident. Based on this, the NRC staff further concludes that the proposed revision to the remedial actions for LCO 3.7.10 (CREVS) and LCO 3.7.11 (CRACS), which is the deletion of Required Actions D.1.2 (CREVS) and C.1.2 (CRACS), is acceptable and meets 10 CFR 50.36.

With the deletion of Required Actions D.1.2 (CREVS) and C.1.2 (CRACS), the licensee has also proposed to re-number Required Actions D.1.1 (CREVS) and C.1.1 (CRACS) to be Required Actions D.1 (CREVS) and C.1 (CRACS). Because, without Required Actions D.1.2 (CREVS) and C.1.2 (CRACS), there remains only the single Required Action D.1.1 (CREVS) or C.1.1 (CRACS), the NRC staff concludes that this is an administrative change, which does not change any requirements in the TSs, to account for the deletion of Required Actions D.1.2 (CREVS) and C.1.2 (CRACS) within the format of the TSs, and is, therefore, acceptable and meets 10 CFR 50.36.

4.2 Justification for Changes to TS 3.7.13

For TS 3.7.13, the licensee has proposed to revise (1) Condition A, currently for one EES train inoperable in Mode 1, 2, 3, or 4, and (2) Condition D, currently for one EES train inoperable during movement of irradiated fuel assemblies in the fuel building. The licensee is not changing the required actions or CTs for either of these two conditions. The revised Conditions A and D would be the following:

1. New Condition A, for one EES train inoperable, would be extended from the current Modes 1 through 4 to include all of the modes of applicability for LCO 3.7.13. The mode of applicability of movement of irradiated fuel assemblies in the fuel building would be added to Condition A. The new Condition A would be simply “One EES train inoperable.”

2. New Condition D would be for the required action and associated completion time of [the new] Condition A not being met during movement of irradiated fuel assemblies in the fuel building.

Because the modes of applicability for LCO 3.7.13 are Modes 1, 2, 3, and 4, and during movement of irradiated fuel assemblies in the fuel building, the proposed change to Condition A means that the new Condition A, for one EES train inoperable, would be extended to also include the movement of irradiated fuel assemblies in the fuel building. Since the current

Condition D is for one EES train inoperable during movement of irradiated fuel assemblies in the fuel building, the proposed new Condition A would be extended to include the current Condition D.

The current Conditions A and D have the following required actions and CTs:

1. For Condition A, the Required Action A.1 to restore the inoperable EES train to operable status within 7 days, and

2. For Condition D, the Required Action D.1 or D.2 to immediately either place the operable EES train in the emergency mode of operation, or suspend the movement of irradiated fuel assemblies in the fuel building.

By adding the mode of applicability of movement of irradiated fuel assemblies in the fuel building to Condition A, the licensee is proposing to change the required actions in Item 2 above to the required action in Item 1 above. Instead of immediately either placing the operable EES train in the emergency mode of operation, or suspending the movement of irradiated fuel assemblies in the fuel building, the licensee would first have 7 days to restore the inoperable EES train to operable status. Only if the licensee could not meet the required action of restoring the inoperable train to operable status within 7 days would the licensee enter the required actions of immediately either placing the operable EES train in the emergency mode of operation, or suspending the movement of irradiated fuel assemblies in the fuel building. The proposed new Condition D remains restricted to the mode of movement of irradiated fuel assemblies in the fuel building, and does not include the Mode 1, 2, 3, or 4, because the current Condition C addresses Mode 1, 2, 3, or 4.

In changing the current required actions for an inoperable EES train, during the mode of applicability of movement of irradiated fuel assemblies in the fuel building, to that of allowing the licensee 7 days to first restore the inoperable train to operable status and then immediately either place the operable EES train in the emergency mode of operation, or suspend the movement of irradiated fuel assemblies in the fuel building, the licensee stated that the proposed changes would revise TS 3.7.13 for the EES to be consistent with the Standard Technical Specifications for Westinghouse plants like Callaway (NUREG-1431) for emergency ventilation systems that are similar in purpose to the EES.

Conclusions for Proposed TSs 3.7.13 Changes

The NRC staff has reviewed the proposed changes to TS 3.7.13. It is correct that the licensee has proposed changes that are consistent with TS 3.7.13, “Fuel Building Air Cleanup System (FBACS),” in NUREG-1431 for Westinghouse plants and the FBACS performs the same safety functions as the EES for Callaway. The FBACS filters airborne radioactive particulates from the area of the fuel pool following an FHA or LOCA. Also, the proposed changes would make TS 3.7.13 consistent with (1) the Callaway TSs where with one train of a system being inoperable the first required action is to allow the licensee to restore the inoperable train to operable status within some specified CT and (2) the proposed changes to TS 3.7.10 for the CREVS, another emergency filter ventilation system. Also, the proposed CT of 7 days to restore the inoperable EES train, before the licensee has to either place the operable EES train in the emergency mode of operation, or suspend the movement of irradiated fuel assemblies in

the fuel building, is the same as the CT for the FBACS in the standard technical specification and in TS 3.7.10. Therefore, the NRC staff concludes that the proposed changes to TS 3.7.13 are acceptable and meet 10 CFR 50.36.

4.3 Conclusion

Based on the conclusions in Sections 4.1 and 4.2 of this SE, the NRC staff has concluded that the proposed changes to TSs 3.7.10, 3.7.11, and 3.7.13 meet 10 CFR 50.36. Therefore, the NRC staff also concludes that the proposed amendment to the Callaway operating license is acceptable.

In Attachments 4 and 5 to its application, respectively, the licensee identified changes to the TS Bases and to the FSAR that are related to its proposed amendment. The NRC staff has reviewed these changes and has determined that it has no disagreements with the identified changes to the TS Bases, but has a disagreement with the changes to the FSAR. The disagreement with the changes to the FSAR is discussed in Section 4.1 of this SE. Regardless of its comments on these changes to the TS Bases and FSAR, the licensee is not required to, and did not request, approval of these changes. As such, NRC staff neither approves nor disapproves of these changes. Changes to the TS Bases are controlled by TS 5.5.14, "Technical Specifications (TS) Bases Control Program," and changes to the FSAR are controlled by 10 CFR 50.59, "Changes, tests, and experiments."

5.0 STATE CONSULTATION

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

6.0 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 (71 FR 43536, published August 1, 2006). 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.

7.0 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: Jack Donohew

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cc:
Professional Nuclear Consulting, Inc.
19041 Raines Drive
Derwood, MD 20855

John O'Neill, Esq.
Pillsbury Winthrop Shaw Pittman LLP
2300 N. Street, N.W.
Washington, D.C. 20037

Mr. Keith A. Mills, Supervising Engineer
Regional Regulatory Affairs/Safety Analysis
AmerenUE
P.O. Box 620
Fulton, MO 65251

U.S. Nuclear Regulatory Commission
Resident Inspector Office
8201 NRC Road
Steedman, MO 65077-1302

Mr. Les H. Kanuckel
Manager, Quality Assurance
AmerenUE
P.O. Box 620
Fulton, MO 65251

Missouri Public Service Commission
Governor Office Building
200 Madison Street
Jefferson City, MO 65102-0360

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-4005

Mr. H. Floyd Gilzow
Deputy Director for Policy
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102-0176

Mr. Rick A. Muench
President and Chief Executive Officer
Wolf Creek Nuclear Operating Corporation
P.O. Box 411
Burlington, KA 66839

Mr. Dan I. Bolef, President
Kay Drey, Representative
Board of Directors Coalition for the Environment
6267 Delmar Boulevard
University City, MO 63130

Mr. Lee Fritz, Presiding Commissioner
Callaway County Court House
10 East Fifth Street
Fulton, MO 65151

Mr. David E. Shafer
Superintendent, Licensing
Regulatory Affairs
AmerenUE
P.O. Box 66149, MC 470
St. Louis, MO 63166-6149

Manager, Regulatory Affairs
AmerenUE
P.O. Box 620
Fulton, MO 65251

Mr. Keith G. Henke, Planner
Division of Community and Public Health
Office of Emergency Coordination
930 Wildwood P.O. Box 570
Jefferson City, MO 65102

Certrec Corporation
4200 South Hulen, Suite 630
Fort Worth, TX 76109

Director, Missouri State Emergency Management Agency
P.O. Box 116
Jefferson City, MO 65102-0116