



~~Security-Related Information – Withhold Under 10 CFR 2.390~~

January 23, 2019

ULNRC-06477

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

10 CFR 50.90

Ladies and Gentlemen:

**DOCKET NUMBER 50-483  
CALLAWAY PLANT UNIT 1  
UNION ELECTRIC CO.  
RENEWED FACILITY OPERATING LICENSE NPF-30  
SUPPLEMENT TO LICENSE AMENDMENT REQUEST FOR ADDITION  
OF NEW TECHNICAL SPECIFICATION 3.7.20, "CLASS 1E ELECTRICAL  
EQUIPMENT AIR CONDITIONING (A/C) SYSTEM" (LDCN 16-0013)**

References:

1. Ameren Missouri letter ULNRC-06401, "License Amendment Request for Addition of New Technical Specification 3.7.20, 'Class 1E Electrical Equipment Air Conditioning (A/C) System' (LDCN 16-0013)," dated March 9, 2018 (ADAM Accession Number ML18068A685)
2. NRC letter, "Callaway Plant, Unit No. 1 – Regulatory Audit Summary Regarding License Amendment Request to Incorporate a New Technical Specification 3.7.20 (EPID-L-2018-LLA-0062)," dated January 4, 2019. (ADAMS Accession Number ML18353B016)
3. NRC Request for Additional Information (received via e-mail, "Formal Release of RAIs, Ref: Callaway Plant Class 1E LAR, L-2018-LLA-0062" on January 9, 2019) (ADAMS Accession Number ML19010A010)

By letter dated March 9, 2018 (Reference 1) Union Electric Company (dba Ameren Missouri) submitted a License Amendment Request (LAR) for the Callaway Plant. Per the requested license amendment, the Callaway Technical Specifications would be revised to incorporate a new Technical Specification (TS), i.e., TS 3.7.20, for the Class 1E Electrical Equipment Air Conditioning (A/C) System at Callaway. In addition, TS 5.5.11, "Ventilation Filter Testing Program," would be revised to change the value specified for the wattage required to be dissipated by the heater in each control room pressurization train from  $15 \pm 2$  kW to  $5 \pm 1$  kW.

Attachment 6 to this letter contains ~~sensitive information~~.  
Withhold from public disclosure under 10 CFR 2.390.  
Upon removal of Attachment 6, this letter is uncontrolled.

The Class 1E Electrical Equipment A/C System provides area cooling within the Control Building for the Class 1E switchgear, as well as safety-related inverters, batteries and battery chargers. At present, the system is not specifically addressed in the Technical Specifications. Ameren Missouri's proposed LAR will incorporate appropriate TS requirements for this important support system.

The proposed LAR has undergone significant NRC review since the March 9, 2018 submittal, as supported by the performance of an NRC audit in September 2018. The audit identified some items that have been resolved but which require changes to be made to the original LAR. In addition, a design change was made to one of the supporting plant modifications being implemented in connection with the LAR, which also necessitates some changes to the original LAR. This letter is therefore being submitted as a supplement to the LAR. Additional information and revised documents are being provided as attachments to this letter, as explained further below. It should be noted that the proposed TS changes themselves are not being changed by this LAR supplement.

If approved, new TS 3.7.20, "Class 1E Electrical Equipment Air Conditioning (A/C) System," will include a Limiting Condition for Operation (LCO) statement, Applicability (specifying the conditions for when the LCO must be met), Conditions and Required Actions (along with specified Completion Times) to be applied when the LCO is not met, as well as appropriate Surveillance Requirements for the Class 1E Electrical Equipment A/C trains at Callaway.

As explained in the March 9, 2018 LAR, under the current Technical Specifications without TS 3.7.20, application of the TS definition of Operability requires declaring the associated electrical TS LCOs not met (for the affected Class 1E electrical equipment) when a Class 1E Electrical Equipment A/C train is declared nonfunctional, in light of the support function provided by the A/C trains. This is overly restrictive and allows insufficient time to restore the nonfunctional Class 1E Electrical Equipment A/C train to a functional status (before a plant shutdown is required) due to the very short Completion Times and/or LCO 3.0.3 requirements that apply upon declaring the Class 1E electrical equipment inoperable. Introducing new TS 3.7.20 for the support system function performed by the Class 1E Electrical Equipment A/C trains would allow LCO 3.0.6 to be applied so that the support system inoperability can be addressed via the Conditions and Required Actions of TS 3.7.20.

To support implementation of proposed TS 3.7.20, and as described in the LAR, two plant modifications are being made at Callaway that will enhance the capability of one Class 1E Electrical Equipment A/C train to provide adequate area cooling for both trains of Class 1E electrical equipment during normal and accident conditions in the event one Class 1E Electrical Equipment A/C train is declared inoperable. Plant modification MP 16-0024 involves the installation of recirculation fans and ducts to promote the circulation of cool air from one Class 1E Electrical Equipment A/C train to the rooms/areas of both Class 1E electrical equipment trains. The additional fans and ducts are collectively referred to as the supplemental cooling system. The supplemental cooling system is intended to be used to fulfill the Required Actions for Condition A of Proposed TS 3.7.20 when a Class 1E Electrical Equipment A/C train is declared inoperable.

Plant modification MP 17-0024 will reduce the wattage (heat dissipation) required of the charcoal heaters in the pressurization trains associated with the control room ventilation system. This will reduce the heat load seen by either or both of the Class 1E Electrical Equipment A/C trains since the Class 1E Electrical Equipment A/C System interacts with the control room ventilation system within

the overall Control Building ventilation envelope. Implementation of modification MP 17-0024 requires revising part "e" of TS 5.5.11, "Ventilation Filter Testing Program (VFTP)," wherein the value specified for the wattage required to be dissipated by the heater in each control room pressurization train would be changed from 15 +/- 2 kW to 5 +/- 1 kW, consistent with the heater wattage reduction intended per the modification.

On September 26 and 27, 2018, the NRC conducted a regulatory audit at the Callaway Plant in order to further develop an understanding of the technical basis for the LAR. A letter providing a summary of the audit (Reference 2), including documentation of the questions and responses discussed during the audit, was issued by the NRC on January 4, 2019. In light of the supporting information provided during the audit for Ameren Missouri's LAR, the documented audit questions and responses are provided herein as Attachment 1 to this letter. In addition, at the conclusion of the audit, it was determined that a Request for Additional Information (RAI) was needed to further address one area of questions developed from the audit. The RAI (Reference 3) was issued (and electronically provided to Callaway) on January 8, 2019. A response to the RAI is due to be submitted on or by February 8, 2019.

In regard to modification MP 16-0024, it should be noted that a change to the planned modification was incorporated after submittal of the March 9, 2018 LAR. This change was discussed in the audit conducted in September 2018. The main change to the planned modification is a relocation of the fans and associated ductwork on the 2016' elevation of the Control Building. The change was required to allow implementation of the modification while the plant was online. These modification changes, as well as resolution of various items addressed during the audit, require some of the information provided in the March 9, 2018 LAR to be revised. Attachment 2 is therefore included in this LAR supplement to identify all changes being made to the LAR. New or revised information is provided and explained in the attachment.

The rerouting of ductwork and associated changes to floor/wall penetrations being made per the revision of MP 16-0024 (as described above) require changes to be made to figures that were provided in the LAR. Specifically, the figures depicting the air-flow paths and directions for the supplemental cooling system on the 2000' and 2016' levels of the Control Building, as provided in Enclosure 1 of the original LAR, require revision. These figures have been revised and are provided in Attachment 6 of this LAR supplement. It should be noted that these figures contain security-sensitive information, and as such, they should be withheld from public disclosure in accordance with 10 CFR 2.390. Only these figures contain information required to be withheld from public disclosure in regard to this submittal.

Another item stemming from the September 2018 audit was the need to make some changes to the TS Bases that were proposed for new TS 3.7.20, i.e., to what was originally provided in Attachment 5 to the LAR. The changes consist of a minor correction identified per Item 20 of the audit items list contained in Attachment 1, the insertion of some clarifying text to clearly link the supplemental cooling system to the "mitigating actions" required per Required Action A.1 of proposed TS 3.7.20, and the insertion of some additional, clarifying text (as further explained in Attachment 2) pertaining to the scope of testing required per proposed Surveillance Requirement (SR) 3.7.20.1. The changes to the proposed TS Bases for TS 3.7.20 are provided in Attachment 3 of this LAR supplement. Revision bars indicate where these changes have been incorporated relative to what was provided in Attachment

5 of the LAR. As noted in the LAR, and as applicable to this supplement, the TS Bases changes are provided for information only. Final TS Bases changes will be implemented pursuant to TS 5.5.14, "Technical Specification (TS) Bases Control Program," at the time the requested license amendment is implemented.

As noted above, as described in the LAR, and as discussed extensively during the audit, a supplemental cooling system is being installed in the plant per plant modification MP 16-0024, which will enhance the capability of one Class 1E Electrical Equipment A/C train to provide adequate area cooling for both trains of Class 1E electrical equipment during normal and accident conditions in the event one Class 1E Electrical Equipment A/C train is declared inoperable. As noted per Item 21 in the audit items list, it was agreed during the audit that requirements for this new system should be specified in Chapter 16 of the Callaway FSAR, which is the equivalent of an Operational or Technical Requirements Manual (ORM or TRM) established at other plants. Accordingly, a Chapter 16 Technical Requirement, i.e., FSAR Section 16.7.13, has been developed for the supplemental cooling system, and it is provided as Attachment 4 to this LAR supplement.

The March 9, 2018 LAR included (as Attachment 6 to the Reference 1 letter) a "List of Regulatory Commitments" for commitments made in regard to completion of the two, above-noted modifications needed to support the LAR, i.e., the heater modification for the control room pressurization filter trains per MP 17-0024 and the supplemental cooling system installation per MP 16-0024. One of the commitments identified in regard to MP 16-0024 refers to the "installation of two circulation fans (with isolation dampers) and 12 wall or door penetrations (with fire dampers in wall penetrations) in the battery and switchboard rooms on the 2016' level of the Control building. A similar but less extensive description is given for the physical changes to be made to the 2000' level per MP 16-0024. Due to the aforementioned change made to MP 16-0024 following submittal of the LAR, the commitment description for the 2016' level is being revised (since the modification now involves floor penetrations and reduction in the combined number of door and wall penetrations). In addition, although the commitment description for the 2000' level does not have the same level of detail as what was described for the 2016' level, the 2000' level description is being revised for consistency with the revised description for the 2016' level. The revised commitment descriptions are reflected in a new/revised List of Commitments provided as Attachment 5 to this LAR supplement.

To summarize, and as individually identified above, six attachments are provided with this letter. They provide all of the new or additional information, including revisions to some of the attachments originally provided in the LAR, needed to supplement the LAR. To repeat, Attachment 1 is the list of audit items containing the Questions and Responses documented from the September 2018 audit. Attachment 2 identifies and explains all of the changes being made to the original LAR, as updated by this supplement to the LAR. Attachment 3 provides, for information only, changes to the TS Bases proposed for TS 3.7.20. Attachment 4 provides the change being made to Chapter 16 of the FSAR in order to incorporate requirements for the supplemental cooling system to be installed per plant modification MP 16-0024, specifically in new/revised Section 16.7.13 of the FSAR. Attachment 5 provides a revised "List of Commitments" from what was provided on the original LAR. Lastly, Attachment 6 provides revised supplemental cooling system air-flow figures which have been identified as security-sensitive information and should thus be withheld from public disclosure per 10 CFR 2.390.

As already noted, no changes to the originally proposed TS changes (i.e., new/proposed TS 3.7.20 or the proposed change to TS 5.5.11) are being made by this LAR supplement. Although this LAR provides updated/revised information from what was provided in the March 9, 2018 LAR, the changes made in this submittal do not change the "No Significant Hazards Consideration" conclusions reached in the LAR, nor do they change the conclusion regarding no need for an environmental assessment based on the categorical exclusion provisions of 10 CFR 51.22.

It should be noted that in its March 9, 2018 LAR, Ameren Missouri requested approval of the proposed license amendment request "prior to April 2019." In light of this LAR supplement being submitted at this time, and with the noted, related RAI response pending, the requested approval date is being changed to April 30, 2019 to provide sufficient, remaining review time for the NRC staff. Approval and issuance of the proposed license amendment on or by April 30 would still support implementation of the amendment during the forthcoming refueling outage which is scheduled to begin on April 1, 2019. Notwithstanding expected or likely implementation of the approved amendment during Refuel 23, the original request or allowance for the license amendment to be effective upon issuance and implemented within 120 days from the date of issuance is still desired.

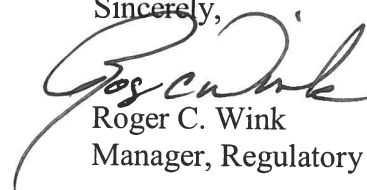
The Callaway Onsite Review Committee has reviewed and approved this LAR supplement for submittal.

In accordance with 10 CFR 50.91 "Notice for public comment; State consultation," Section (b)(1), a copy of this supplement to Ameren Missouri's LAR is being provided to the designated Missouri State official.

If there are any questions regarding this LAR supplement, please contact Mr. Tom Elwood at 314-225-1905.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,



Roger C. Wink  
Manager, Regulatory Affairs

Executed on: January 23<sup>rd</sup>, 2019

Attachments to this letter:

1. Audit Items List with Questions and Responses
2. Summary of Changes Made to Information and Documents Provided in March 9, 2018 LAR
3. Changes to TS Bases Proposed for TS 3.7.20
4. New/Proposed FSAR Section 16.7.13
5. List of Regulatory Commitments
6. Updated Supplemental Cooling System Air-Flow Figures (to be withheld from public disclosure per 10 CFR 2.390)

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