



NUCLEAR REGULATORY COMMISSION

[Docket No. 50-483; NRC-2023-0190]

Union Electric Company, dba Ameren Missouri; Callaway Plant, Unit No. 1

AGENCY: Nuclear Regulatory Commission.

ACTION: License amendment application; opportunity to comment, request a hearing, and petition for leave to intervene.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an amendment to Renewed Facility Operating License No. NPF-30, issued to Union Electric Company, doing business as (dba) Ameren Missouri, for operation of the Callaway Plant, Unit No. 1. The proposed amendment would revise the technical specifications (TSs), TS Bases, and Final Safety Analysis Report (FSAR), to allow use of one train of the normal, non-safety-related service water system to solely provide cooling water support for one of two redundant trains of TS-required equipment when both equipment trains are required to be Operable during cold shutdown/refueling conditions. Corresponding changes to the TS Bases will be made once the amendment to the TSs and FSAR is approved.

DATES: Submit comments by **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. Request for a hearing or petitions for leave to intervene must be filed by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

ADDRESSES: You may submit comments by any of the following methods; however, the NRC encourages electronic comment submission through the **Federal rulemaking website**:

- **Federal rulemaking website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2023-0190**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; email: Stacy.Schumann@nrc.gov. For

technical questions, contact the individual listed in the “For Further Information Contact” section of this document.

- **Mail comments to:** Office of Administration, Mail Stop: TWFN-7-A60M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Program Management, Announcements and Editing Staff.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

FOR FURTHER INFORMATION CONTACT: Mahesh L. Chawla, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone: 301-415-8371; email: Mahesh.Chawla@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID **NRC-2023-0190** when contacting the NRC about the availability of information for this action. You may obtain publicly available information related to this action by any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2023-0190**.

- **NRC’s Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select “Begin Web-based ADAMS Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209, at 301-415-4737, or by email to PDR.Resource@nrc.gov. The “License Amendment Request to Clarify Support System Requirements for the Residual Heat Removal System and Control Room Air Conditioning System Requirements Under Technical Specification 3.4.8, 3.7.11 and 3.9.6 (LDCN 22-0029)” and Response to Regulatory

Audit Questions and Supplement to License Amendment Request Regarding Support System Requirements for the Residual Heat Removal and Control Room Air Conditioning Systems Under Technical Specifications 3.4.8, 3.7.11, and 3.9.6 (LDCN 22-0029), are available in ADAMS under Package Accession Nos. ML22335A507 and ML23289A214, respectively.

- **NRC's PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to PDR.Resource@nrc.gov or call 1-800-397-4209 or 301-415-4737, between 8 a.m. and 4 p.m. eastern time (ET), Monday through Friday, except Federal holidays.

B. Submitting Comments

The NRC encourages electronic comment submission through the **Federal rulemaking website** (<https://www.regulations.gov>). Please include Docket ID **NRC-2023-0190** in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at <https://www.regulations.gov> as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

II. Introduction

The NRC is considering issuance of an amendment to Renewed Facility Operating License No. NPF-30, issued to Union Electric Company, dba Ameren

Missouri, for operation of the Callaway Plant, Unit No. 1, located in Callaway County, Missouri.

On February 21, 2023, the NRC staff published a proposed no significant hazards consideration (NSHC) determination in the *Federal Register* (88 FR 10559) for the proposed amendment. The notice is being reissued in its entirety due to the revised scope, description of the amendment request, and proposed NSHC determination of the license amendment request resulting from the supplement dated October 16, 2023.

The proposed amendment would revise the TSs, TS Bases, and FSAR to allow use of one train of the normal, non-safety-related service water system to solely provide cooling water support for one of two redundant trains of TS-required equipment when both equipment trains are required to be Operable during cold shutdown/refueling conditions. The supported equipment/systems affected by the proposed change are the residual heat removal system and control room air conditioning system, as applicable during Modes 5 and 6. The applicable/affected TS limiting conditions for operation (LCOs) are TS LCO 3.4.8, "RCS [Reactor Coolant System] Loops Mode 5, Loops Not Filled"; TS LCO 3.7.11, "Control Room Air Conditioning System (CRACS)"; and TS LCO 3.9.6, "Residual Heat Removal (RHR) and Coolant Circulation Low Water Level."

Before any issuance of the proposed license amendment, the NRC will need to make the findings required by the Atomic Energy Act of 1954, as amended (the Act), and NRC's regulations.

The NRC has made a proposed determination that the license amendment request involves NSHC. Under the NRC's regulations in section 50.92 of title 10 of the *Code of Federal Regulations* (10 CFR), "Issuance of amendment," this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin

of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of NSHC, which is presented as follows:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

In general, when the unit is shut down, the Technical Specification (TS) requirements ensure that the unit has the capability to mitigate the consequences of postulated accidents, including a fuel handling accident. However, assuming a single failure and concurrent loss of all offsite or all onsite power is not required (as described in Callaway Plant Final Safety Analysis Report, Standard Plant, section 3.1.2). The rationale for this is based on the fact that many design basis accidents (DBAs) that are analyzed in Modes 1, 2, 3, and 4 have no specific analyses in Modes 5 and 6. Worst case bounding events such as loss-of-coolant accidents and limiting pipe breaks are deemed not credible in Modes 5 and 6 because the energy contained within the reactor pressure boundary, reactor coolant temperature and pressure, and the corresponding stresses result in the probabilities of occurrence being significantly reduced or eliminated, and in minimal consequences. These deviations from DBA analysis assumptions and design requirements during shutdown conditions are allowed by the Limiting Conditions [for] Operation (LCOs) for required systems, including those required for mitigation of a fuel handling accident which may be postulated to occur during such conditions (i.e., Modes 5 and 6 or with the reactor defueled/offloaded).

The plant's design is such that, during normal plant operating conditions, the non-safety related Service Water (SW) system supplies cooling water (via safety-related Essential Service Water (ESW) piping) to plant loads, including the Component Cooling Water (CCW) system. During accident/emergency conditions, the safety-related ESW system serves as the emergency back-up for providing cooling water.

The proposed changes to TS 3.4.8 and TS 3.9.6 would make it clear that the SW system is allowed to be a credited support system for one of the two required trains of the Residual Heat Removal (RHR) system in Modes 5 and 6, respectively, except when the plant is in a reduced-inventory, hot-core condition. The proposed change to 3.7.11 would make it clear that the SW system is allowed to be a credited support system for one of the two required trains of the Control Room Air Conditioning System (CRACS) during Modes 5 and 6 and during movement of irradiated fuel assemblies. The SW-supported train in either case would be the one not required to be supported by an emergency diesel generator per TS 3.8.2, "Electrical Sources – Shutdown."

The proposed amendment will not impact the ability of the RHR system to remove decay heat in Modes 5 or 6, or impact its ability to ensure mixing, prevent stratification, and effect gradual

reactivity changes as needed during reactor coolant system boron concentration reductions. A loss of decay heat removal is not an "accident previously evaluated" in the FSAR; however, the design basis for the RHR system is clearly intended to preclude such an event. This intent will still be met, as the Technical Specifications will still require two RHR trains to be Operable during applicable conditions such that one train of the RHR system would remain available assuming either a LOOP [loss of offsite power] or a single failure, consistent with the plant's licensing basis. On that basis, the RHR function would be met via the RHR train supported by the ESW system and an DG [diesel generator], or by the RHR train supported by the non-essential SW system and a normal offsite power source (except as prohibited when the plant is in a reduced-inventory, hot-core condition).

The one FSAR described DBA that may be postulated to occur during Mode 5 or Mode 6 is a fuel handling accident (FHA). The proposed changes do not affect the systems/functions required to mitigate the dose consequences of an FHA. (Control room dose is mitigated by the Control Room Emergency Ventilation System and not by CRACS.) Therefore, the proposed changes do not involve any significant increase in the consequences of the FHA as previously described in the FSAR.

The proposed changes are consistent with the assumptions for system availability made within the accident and transient analysis for shutdown Modes (5 and 6) and do not involve making any physical changes to the plant. As such, the changes do not introduce any new failure mechanisms or transient precursors, nor do they modify the likelihood of any existing precursors to an accident or transient as analyzed in the Callaway Plant FSAR. Based on the above, it is concluded that the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

This proposed license amendment does not involve any physical changes to the plant or any changes to operation, function, or the performance requirements of the CRACS or RHR system (except as described above). As such, it does not introduce any new failure mechanisms or transient precursors different than those previously evaluated. The continued, very low potential for a loss of decay heat removal "event" is as described and explained above.

Therefore, it is concluded that this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The margin of safety is established through equipment design, operating parameters, and the setpoints at which automatic actions are initiated. This amendment makes no physical changes to safety-related systems, operating parameters, or setpoints for initiation of protective actions.

The allowance for one train of the CRACS and RHR systems to be supported by the SW system in lieu of the ESW system during shutdown conditions per the proposed TS changes) is not expected to result in any significant change the availability of these systems for providing their required cooling function. The system alignment wherein the SW system supplies cooling water to the CRACS and the CCW system heat exchangers (the intermediary cooling water loop to the RHR heat exchangers) is a normal operating configuration for these systems. The SW system provides a more than an adequate cooling water flow rate, with system temperature limitations comparable to the ESW system, such that a significant change in residual heat removal rate and control room cooling would not be realized by this change.

Therefore, it is concluded that the proposed change does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the license amendment request involves a NSHC.

The NRC is seeking public comments on this proposed determination that the license amendment request involves NSHC. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 60-day notice period. However, if circumstances change during the notice period, such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the notice period, provided that its final determination is that the amendment involves NSHC. The final determination will consider all public and State comments received. If the Commission takes action prior to the expiration of either the comment period or the notice period, it will publish in the *Federal Register* a notice of issuance. The Commission expects that the need to take this action will occur very infrequently.

III. Opportunity to Request a Hearing and Petition for Leave to Intervene

Within 60 days after the date of publication of this notice, any person (petitioner) whose interest may be affected by this action may file a request for a hearing and petition for leave to intervene (petition) with respect to the action. Petitions shall be filed in accordance with the Commission's "Agency Rules of Practice and Procedure" in 10 CFR part 2. Interested persons should consult 10 CFR 2.309. If a petition is filed, the presiding officer will rule on the petition and, if appropriate, a notice of a hearing will be issued.

Petitions must be filed no later than 60 days from the date of publication of this notice in accordance with the filing instructions in the "Electronic Submissions (E-Filing)" section of this document. Petitions and motions for leave to file new or amended contentions that are filed after the deadline will not be entertained absent a determination by the presiding officer that the filing demonstrates good cause by satisfying the three factors in 10 CFR 2.309(c)(1)(i) through (iii).

If a hearing is requested and the Commission has not made a final determination on the issue of NSHC, the Commission will make a final determination on the issue of no significant hazards consideration, which will serve to establish when the hearing is held. If the final determination is that the amendment request involves NSHC, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing would take place after issuance of the amendment. If the final determination is that the amendment request involves a significant hazards consideration, then any hearing held would take place before the issuance of the amendment unless the Commission finds an imminent danger to the health or safety of the public, in which case it will issue an appropriate order or rule under 10 CFR part 2.

A State, local governmental body, Federally recognized Indian Tribe, or designated agency thereof, may submit a petition to the Commission to participate as a party under 10 CFR 2.309(h) no later than 60 days from the date of publication of this

notice. Alternatively, a State, local governmental body, Federally recognized Indian Tribe, or agency thereof may participate as a non-party under 10 CFR 2.315(c).

For information about filing a petition and about participation by a person not a party under 10 CFR 2.315, see ADAMS Accession No. ML20340A053 (<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML20340A053>) and on the NRC's public website at <https://www.nrc.gov/about-nrc/regulatory/adjudicatory/hearing.html#participate>.

IV. Electronic Submissions (E-Filing)

All documents filed in NRC adjudicatory proceedings, including documents filed by an interested State, local governmental body, Federally recognized Indian Tribe, or designated agency thereof that requests to participate under 10 CFR 2.315(c), must be filed in accordance with 10 CFR 2.302. The E-Filing process requires participants to submit and serve all adjudicatory documents over the internet, or in some cases, to mail copies on electronic storage media, unless an exemption permitting an alternative filing method, as further discussed, is granted. Detailed guidance on electronic submissions is located in the "Guidance for Electronic Submissions to the NRC" (ADAMS Accession No. ML13031A056) and on the NRC's public website at <https://www.nrc.gov/site-help/e-submittals.html>.

To comply with the procedural requirements of E-Filing, at least 10 days prior to the filing deadline, the participant should contact the Office of the Secretary by email at Hearing.Docket@nrc.gov, or by telephone at 301-415-1677, to (1) request a digital identification (ID) certificate, which allows the participant (or its counsel or representative) to digitally sign submissions and access the E-Filing system for any proceeding in which it is participating; and (2) advise the Secretary that the participant will be submitting a petition or other adjudicatory document (even in instances in which the participant, or its counsel or representative, already holds an NRC-issued digital ID certificate). Based upon this information, the Secretary will establish an electronic docket for the proceeding if the Secretary has not already established an electronic docket.

Information about applying for a digital ID certificate is available on the NRC's public website at <https://www.nrc.gov/site-help/e-submittals/getting-started.html>. After a digital ID certificate is obtained and a docket created, the participant must submit adjudicatory documents in Portable Document Format. Guidance on submissions is available on the NRC's public website at <https://www.nrc.gov/site-help/electronic-sub-ref-mat.html>. A filing is considered complete at the time the document is submitted through the NRC's E-Filing system. To be timely, an electronic filing must be submitted to the E-Filing system no later than 11:59 p.m. ET on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an email confirming receipt of the document. The E-Filing system also distributes an email that provides access to the document to the NRC's Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the document on those participants separately. Therefore, applicants and other participants (or their counsel or representative) must apply for and receive a digital ID certificate before adjudicatory documents are filed to obtain access to the documents via the E-Filing system.

A person filing electronically using the NRC's adjudicatory E-Filing system may seek assistance by contacting the NRC's Electronic Filing Help Desk through the "Contact Us" link located on the NRC's public website at <https://www.nrc.gov/site-help/e-submittals.html>, by email to MSHD.Resource@nrc.gov, or by a toll-free call at 1-866-672-7640. The NRC Electronic Filing Help Desk is available between 9 a.m. and 6 p.m., ET, Monday through Friday, except Federal holidays.

Participants who believe that they have good cause for not submitting documents electronically must file an exemption request, in accordance with 10 CFR 2.302(g), with their initial paper filing stating why there is good cause for not filing electronically and requesting authorization to continue to submit documents in paper format. Such filings must be submitted in accordance with 10 CFR 2.302(b)-(d). Participants filing adjudicatory documents in this manner are responsible for serving their documents on all

other participants. Participants granted an exemption under 10 CFR 2.302(g)(2) must still meet the electronic formatting requirement in 10 CFR 2.302(g)(1), unless the participant also seeks and is granted an exemption from 10 CFR 2.302(g)(1).

Documents submitted in adjudicatory proceedings will appear in the NRC's electronic hearing docket, which is publicly available at <https://adams.nrc.gov/ehd>, unless excluded pursuant to an order of the presiding officer. If you do not have an NRC-issued digital ID certificate as previously described, click "cancel" when the link requests certificates and you will be automatically directed to the NRC's electronic hearing dockets where you will be able to access any publicly available documents in a particular hearing docket. Participants are requested not to include personal privacy information such as social security numbers, home addresses, or personal phone numbers in their filings unless an NRC regulation or other law requires submission of such information. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants should not include copyrighted materials in their submission.

For further details with respect to this action, see the application for license amendment dated December 1, 2022 (ADAMS Package Accession No. ML22335A507), as supplemented on October 16, 2023 (ADAMS Package Accession No. ML23289A214).

Attorney for licensee: Jay E. Silberg, Pillsbury Winthrop Shaw Pittman LLP, 1200 17th Street, NW, Washington, DC 20036.

NRC Branch Chief: Jennifer L. Dixon-Herrity.

For the Nuclear Regulatory Commission.

Dated: November 6, 2023.

Mahesh L. Chawla,
*Project Manager, Plant Licensing Branch IV,
Division of Operating Reactor Licensing,
Office of Nuclear Reactor Regulation.*

[FR Doc. 2023-24880 Filed: 11/9/2023 8:45 am; Publication Date: 11/13/2023]