



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

December 7, 2012

Mr. Adam C. Heflin, Senior Vice President
and Chief Nuclear Officer
Union Electric Company
P.O. Box 620
Fulton, MO 65251

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
CALLAWAY PLANT, UNIT 1, LICENSE RENEWAL APPLICATION, SET 18
(TAC NO. ME7708)

Dear Mr. Heflin:

By letter dated December 15, 2011, Union Electric Company d/b/a Ameren Missouri (the applicant) submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54 (10 CFR Part 54) for renewal of Operating License No. NPF-30 for the Callaway Plant, Unit 1 (Callaway). The staff of the U.S. Nuclear Regulatory Commission (NRC or the staff) is reviewing this application in accordance with the guidance in NUREG-1800, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants." During its review, the staff has identified areas where additional information is needed to complete the review. The staff's requests for additional information are included in the enclosure. Further requests for additional information may be issued in the future.

Items in the enclosure were discussed with Sarah G. Kovaleski, of your staff, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me by telephone at 301-415-2946 or by e-mail at Samuel.CuadradoDeJesus@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Samuel Cuadrado de Jesús".

Samuel Cuadrado de Jesús, Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosure:
As stated

cc w/encl: Listserv

CALLAWAY PLANT, UNIT 1
LICENSE RENEWAL APPLICATION
REQUEST FOR ADDITIONAL INFORMATION, SET 18

RAI B1.4-1a

Background:

In its September 6, 2012, response to request for additional information (RAI) B1.4-1, the applicant described the programmatic activities that will be used to evaluate plant-specific and industry operating experience related to aging and the applicant discussed how these activities align with the guidance in License Renewal Interim Staff Guidance (LR-ISG), LR-ISG-2011-05, "Ongoing Review of Operating Experience," Appendix A, Itemized Change No. 7.

Issue:

It is not clear from the applicant's response whether the programmatic activities for the ongoing review of operating experience will be fully consistent with the areas of further review described in LR-ISG-2011-05, Appendix A, Itemized Change No. 7. In addition, the response does not contain sufficient information to facilitate the staff's review of the applicant's operating experience review activities on a case-specific basis. The areas in question follow.

- (a) The response states that the sources of industry operating experience will be based on the document categories defined in the Institute of Nuclear Power Operations' "Guidelines for Use of Operating Experience" document. This document lists the typical sources of industry operating experience; however, constraining the sources to this list could preclude the capture and evaluation of other U.S. Nuclear Regulatory Commission (NRC or the staff) and industry guidance documents and standards applicable to aging-related degradation and aging management.
- (b) The response states that codes will be established within the corrective action program (CAP) to assist in the identification and trending of aging-related degradation; however, the response does not describe how adverse trends will be identified and evaluated.
- (c) The response states that evaluations of operating experience related to aging will consider aging management programs (AMPs) associated with the operating experience; however, it is not clear whether activities, criteria, and evaluations integral to the elements of the AMPs will also be considered. As an example, the operating experience may not directly identify a particular AMP, but it may concern an inspection method used in several AMPs.
- (d) The response, under item 5, states that certain information will be considered in the evaluation of operating experience related to aging; however, the response is not clear as to whether the assessment of this information will be recorded in the operating experience evaluation.
- (e) The response states that the results of the AMP activities will be documented. However, the response does not indicate whether these results, both satisfactory and unsatisfactory, also will be reviewed to determine whether the frequency of future inspections should be

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adjusted, whether new inspections should be established, and whether the inspection scope should be adjusted or expanded in order to manage the effects of aging.

- (f) The response states that the Operating Experience Program Coordinators and Aging Management Coordinator will have key responsibilities in the processing of aging-related operating experience. The response also states that the individuals in these positions will receive training on aging concepts; however, it is not clear whether this training will be required on a periodic basis or whether there are provisions to account for personnel turnover so that individuals new to these positions also receive training on aging concepts.
- (g) The response describes training for and responsibilities of the Aging Management Coordinator with respect to the review and communication of operating experience and states that these responsibilities apply "throughout the period of extended operation." Elsewhere, the response states that operating experience will be reviewed for impacts to the aging management activities and personnel training will be enhanced "upon receipt of the renewed operating license." Given these two implementation timeframes, it is unclear when the Aging Management Coordinator's responsibilities for processing aging-related operating experience will begin.

Request:

Describe consistency between the proposed operating experience review activities and the guidance in LR-ISG-2011-05, Appendix A, Itemized Change No. 7, by responding to the following items.

- (a) Clarify whether procedures will direct personnel to submit a guidance document or standard into the Operating Experience Program for evaluation when the guidance document or standard is applicable to aging-related degradation or aging management.
- (b) Indicate whether entries in the CAP associated with the aging-related degradation trend codes will be periodically reviewed to identify adverse trends. Also indicate whether any such adverse trends will be entered into the CAP for evaluation.
- (c) Indicate whether evaluations of operating experience related to aging will include consideration of activities, criteria, and evaluations integral to the elements of the plant AMPs.
- (d) Indicate whether the assessment of the following information will be recorded in the evaluations of aging-related operating experience: (i) systems, structures, and components, (ii) materials, (iii) environments, (iv) aging effects, (v) aging mechanisms, (vi) AMPs, and (vii) the activities, criteria, and evaluations integral to the elements of the AMPs.
- (e) Clarify whether satisfactory and unsatisfactory AMP results will be reviewed to determine if it is necessary to adjust the frequency of future inspections, establish new inspections, and adjust or expand the inspection scope to ensure that the effects of aging will be adequately managed.

- (f) Clarify whether the Operating Experience Program Coordinators and Aging Management Coordinator will receive training on aging concepts on a periodic basis and indicate whether the training on aging concepts is required of personnel new to these roles.
- (g) Clarify whether the Aging Management Coordinator's responsibilities for processing aging-related operating experience will begin on receipt of the renewed operating license.

Describe and justify any areas of inconsistency with LR-ISG-2011-05 or otherwise demonstrate how operating experience will be reviewed to ensure that the effects of aging will be adequately managed.

Based on the response to this RAI, if any enhancements to the existing activities for the ongoing review of operating experience are necessary, provide the schedule for implementing these enhancements. Also provide a justification if implementation is later than the date when the renewed operating license is scheduled to be issued, if approved.

December 7, 2012

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Sincerely,

/ra/

Samuel Cuadrado de Jesús, Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosure:

As stated

cc w/encl: Listserv

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ADAMS Accession No.: ML12326A915

*concurrence via e-mail

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NAME	IKing	SCuadrado	DMorey	SCuadrado
DATE	11/29/2012	12/4/2012	12/7/2012	12/7/2012

OFFICIAL RECORD COPY

Letter to A. Heflin from S. DeJesus Cudrado dated, December 7, 2012

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