

March 30, 2006

MEMORANDUM TO: David Terao, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

FROM: Jack N. Donohew, Senior Project Manager **/RA/**
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

SUBJECT: CALLAWAY PLANT, UNIT 1 - RE: REACTOR COOLANT SYSTEM
(RCS) LEAKAGE DETECTION INSTRUMENTATION
METHODOLOGY (TAC NO. MB8220)

In its letter dated August 26, 2005 (ULNRC-05197), Union Electric Company (the licensee) submitted a license amendment request (LAR) to change the Final Safety Analysis Report (FSAR) for the Callaway Plant, Unit 1 (Callaway) to revise the methodology for the RCS leak detection instrumentation. The licensee stated that the revision would clarify the requirements of the containment atmosphere gaseous radioactivity monitor with regard to the RCS leak detection capability and justify that the monitor can be considered operable in compliance with Limiting Condition for Operation 3.4.15, in Technical Specification (TS) 3.4.15, "RCS Leakage Detection Instrumentation," during all applicable reactor modes. There are no proposed changes to the Callaway TSs. This LAR involves the licensee's commitments in the FSAR and the Nuclear Regulatory Commission (NRC) Regulatory Guide (RG) 1.45, "Reactor Coolant Pressure Boundary Leakage Detection Systems," Revision 0, dated May 1973, which describes acceptable methods for RCS leakage detection systems.

The LAR explained that there were two conditions under which the containment atmosphere gaseous radioactivity monitor would not adequately respond to RCS leakage with respect to the criteria in RG 1.45, but that there were conditions allowed by the TSs where the monitor would adequately respond.

In reviewing the above LAR, I determined that the proposed revision to FSAR Table 5.2-6, which describes the licensee's compliance with the NRC RG 1.45, addressed only one of the two conditions when the containment atmosphere gaseous radioactivity monitor would not adequately respond to RCS leakage. The proposed revision to FSAR Section 5.2.5.2.3 addressed both conditions. I requested that the licensee add a phrase from the revision of FSAR Section 5.2.5.2.3 to the revision of FSAR Table 5.2-6 so that the revision to the table would address both conditions. The licensee's response is in the two attached emails from the licensee.

I also requested that the licensee address when, in its process to revise the FSAR in response to the LAR being approved, any changes to the FSAR revision would come under Section 50.59 of Title 10 of the *Code of Federal Regulations*. The licensee's response is in the two attached emails from the licensee.

The licensee's responses to my questions on the LAR provide additional clarifying information, do not expand the scope of the application as originally noticed, and do not change the staff's original proposed no significant hazards consideration determination for the LAR that was published in the *Federal Register* on February 28, 2006 (71 FR 10079).

Docket No. 50-483

Attachments: 1. E-mail dated March 13, 2006
2. E-mail dated March 21, 2006

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Docket No. 50-482

Attachments: 1. E-mail dated March 13, 2006
2. E-mail dated March 21, 2006

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| NAME | JDonohew | LFeizollahi | DTerao |
| DATE | 3/29/06 | 03/28/06 | 03/30/06 |

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E-MAIL DATED MARCH 13, 2006

From: "Shafer, David E" <DShafer@ameren.com>
To: <jnd@nrc.gov>
Date: 3/13/06 3:48PM
Subject: FW: Follow up on Discussion on RCS Leakage Detection Instrumentation LAR

Jack,

Please accept the following responses to your questions regarding the RCS Leakage Detection Instrumentation LAR. These responses address a discussion on February 16, 2006 concerning the containment atmosphere gaseous radioactivity monitor. Participants on the telecon were: Jack Donohew (NRC), Brian Holderness (AmerenUE), and Steve Wideman (WCNOC).

1. Request to add additional wording to the proposed words on compliance with Position 5 in USAR Table 5.2-6. The request was to add "and if elevated reactor coolant gaseous activity is present." to the end of the sentence stating: "For the containment gaseous radioactivity monitors reliable leak detection is possible, provided that the equilibrium activity of the containment atmosphere is below the level that would mask the change in activity corresponding to 1 gpm leak in one hour."

Response: Callaway has reviewed the proposed additional wording and is in agreement to incorporate the wording.

2. Concerning the commitment to implement the proposed changes to the TS Bases and FSAR Changes within 90 days of NRC approval.

Response: As stated in ULNRC-05197, dated August 26, 2005, Callaway will incorporate the changes to the TS Bases and the electronic FSAR as interim revisions within 90 days of NRC approval.

Please let Brian Holderness or Keith Connelly know if you need additional information.

Dave Shafer
Phone 314-554-3104
Fax 314-554-3558
Email dshafer@ameren.com

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E-MAIL DATED MARCH 21, 2006

From: "Shafer, David E" <DShafer@ameren.com>
To: "Jack Donohew" <JND@nrc.gov>
Date: 3/21/06 3:27PM
Subject: RE: FW: Follow up on Discussion on RCS Leakage Detection Instrumentation LAR

Yes, you may use the information to support the subject amendment request. The message at the bottom of the email is one that is automatically added to out-going email from Ameren.

Additionally, after we incorporate the FSAR changes for the LAR to the "electronic FSAR", this will require that future changes be evaluated under the requirements of 10 CFR 50.59.

Dave Shafer
Phone 314-554-3104
Fax 314-554-3558
Email dshafer@ameren.com

-----Original Message-----

From: Jack Donohew [mailto:JND@nrc.gov]
Sent: Monday, March 20, 2006 9:42 AM
To: Shafer, David E
Subject: Re: FW: Follow up on Discussion on RCS Leakage Detection Instrumentation LAR

Your email below ended with the following statement: "The information contained in this message may be privileged and/or confidential and protected from disclosure. If the reader of this message is not the intended recipient, or an employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. Note that any views or opinions presented in this message are solely those of the author and do not necessarily represent those of Ameren. All emails are subject to monitoring and archival. Finally, the recipient should check this message and any attachments for the presence of viruses. Ameren accepts no liability for any damage caused by any virus transmitted by this email. If you have received this in error, please notify the sender immediately by replying to the message and deleting the material from any computer. Ameren Corporation"

I need to know if I can use the information provided to the two questions below on the license amendment request (LAR) dated August 36, 2005 (ULNRC-05197) on the RCS leakage detection system may be docketed for this LAR.

Also, in the response to question 2, there is the statement that "Callaway will incorporate the changes to the TS Bases and the electronic FSAR as interim revisions within 90 days of NRC approval." Does incorporating the FSAR changes for the LAR to the "electronic FSAR" bring these FSAR changes under the regulation 10 CFR 50.59?
<JND>

>>> "Shafer, David E" <DShafer@ameren.com> 03/13/06 3:48 PM >>>

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Response: Callaway has reviewed the proposed additional wording and is in agreement to incorporate the wording.

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Please let Brian Holderness or Keith Connelly know if you need additional information.

Dave Shafer
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Email dshafer@ameren.com

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