

May 19, 2003

LICENSEE: Union Electric Company

FACILITY: Callaway Plant

SUBJECT: SUMMARY OF MEETING WITH UNION ELECTRIC COMPANY ON
APRIL 15, 2003, TO DISCUSS ITS PLANNED REPLACEMENT OF STEAM
GENERATORS IN REFUELING OUTAGE 14 FOR CALLAWAY PLANT

A meeting was held on Tuesday, April 15, 2003, between the Nuclear Regulatory Commission (NRC) staff and Union Electric Company, the licensee for the Callaway Plant. The meeting was at the request of the licensee for it to present its steam generator replacement project (SGRP) to replace the existing four steam generators (SGs) with improved SGs at the Callaway Plant. The work and licensing issues are scheduled for the upcoming 13th and 14th refueling outages scheduled for the Spring of 2004 and Fall of 2005, respectively. The meeting was originally scheduled for March 26, 2003, but had to be rescheduled for April 15, 2003. The notice for the original and rescheduled meetings were issued on February 20 and March 20, 2003, respectively.

Enclosure 1 is the list of attendees. Enclosure 2 is the slides handed out by the licensee. There was no handout from the NRC staff. Enclosure 3 is a list of acronyms used by the licensee in its handout.

The agenda for the meeting is the following (which is taken from the second slide of Enclosure 2):

- Introduction
- General Description of Replacement Steam Generators (RSG) (Slides 3 through 18)
- Refuel 13 (Spring 2004) Work Scope (Slides 19 through 23)
- Refuel 14 (Fall 2005) Work Scope (Slides 24 through 31)

In the general description of the RSG, the licensee explained why it has decided to replace the SGs, presented a comparison between the RSG and the original steam generators (OSG), discussed improvements in the RSG, and showed the current status of constructing and delivering the RSG. The improvements in the RSG are given on Slide 7. The improvements include the helix anti-stratification device, the foreign object capture system, and the tubing shown on Slides 8 through 10. A picture of the SG fabrication line at Framatome ANP, the company selected to fabricate the RSG, is Slide No. 5.

Although the RSGs are to be installed in Refueling Outage No. 14 (Refuel 14), there is work also planned for Refuel 13 and the operating cycle between Refuels 13 and 14. The work planned for Refuel 13 is shown in Slide 19: sludge lance platform modification, access door cut through secondary shield wall, and final SGRP walkdowns prior to Refuel 14. A picture of the door to be cut is shown in Slide 20 and a drawing of the sludge lance platform modification is shown in Slide 21. The existing platform will be expanded to provide more space for workers

who would be performing sludge lance work on the RSG during future refueling outages. The licensee also stated that the potential licensing actions needed for Refuel 13 are approval of the application of (1) leak before break (LBB), and (2) the American Society of Civil Engineers (ASCE) 4-86 seismic combination methodologies in analyses for the opening in the secondary shield wall. Work planned for the operating cycle between Refuels 13 and 14 is Slide 23.

For Refuel 14, the licensee stated that the potential licensing actions that may be needed for the refueling outage are the following: relief from the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) if the RSG installation goes beyond the end of the second 10-year interval, removal of the SG trip time delay circuits to improve water level stability in the RSG, use of the RETRAN-3D computer code and an enhanced thick-metal model for selected heat-up events, and simplifying the current licensing basis methodology for the excessive steam load event. The licensee's schedule for licensing action submittals to NRC for Refuels 13 and 14 is given in Slide 31.

After the licensee completed its presentation, there was a period of questions from the NRC staff and the meeting was concluded. There were no decisions made concerning the potential licensing actions to be submitted to the NRC.

/RA/

Jack Donohew, Senior Project Manager, Section 2
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosures: 1. List of Meeting Attendees
2. Licensee's Handout (ADAMS Accession No. ML031060221)
3. List of Acronyms

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NRC-001

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DATE	5/13/2003	5/12/03	5/13/03

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LIST OF MEETING ATTENDEES

PLANNED STEAM GENERATORS REPLACEMENT AT CALLAWAY PLANT

APRIL 15, 2003

<u>NAME</u>	<u>AFFILIATION</u>
J. Donohew	NRC/NRR/PDIV-2
J. Tsao	NRC/NRR/EMCB
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J. Pulsipher	NRC/NRR/SPLB
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C. Scuhland	Fulton Sun Newspaper (by phone)

Where:

NRC	= Nuclear Regulatory Commission
NRR	= Office of Nuclear Reactor Regulation
PDIV-2	= Project Directorate IV-Section 2
EMCB	= Materials and Chemical Engineering Branch
EMEB	= Mechanical and Civil Engineering Branch
SPLB	= Plant Systems Branch
SRXB	= Reactor Systems Branch
AmerenUE	= Ameren Union Electric Company

ENCLOSURE 1

LICENSEE'S HANDOUT FOR APRIL 15, 2003, MEETING
CALLAWAY STEAM GENERATOR REPLACEMENT PROJECT
ADAMS ACCESSION NO. ML031060221

ENCLOSURE 2

LIST OF ACRONYMS

ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
DG	NRC draft regulatory guide
FLB	Feedline break
FSAR	Callaway Final Safety Analysis Report
JSW	Japan Steel Works
LBB	Leak before break
LBLOCA	Large break loss of coolant accident
LOAC	Loss of alternating current (AC) power
LONF	Loss of normal flow
MCO	Moisture carryover
OSG	Original steam generators
PWR	Pressurized water reactor
RCS	Reactor coolant system
Refuel 13	Refueling Outage No. 13
RHR	Residual heat removal system
RMI	Reflective metal insulation
RSG	Replacement steam generators
SBLOCA	Small break loss of coolant accident
SG (or S/G)	Steam generator
SGRP	Steam Generator Replacement Project
SGT	Steam Generator Team, a Washington Group International, Inc./ Framatome ANP, Inc. Company
TSP Type	Tube support plate type

Callaway Plant, Unit 1

cc:

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