



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005

OCT 11 2002

Garry L. Randolph, Senior Vice  
President and Chief Nuclear Officer  
Union Electric Company  
P.O. Box 620  
Fulton, Missouri 65251

SUBJECT: REGULATORY PERFORMANCE MEETING SUMMARY

Dear Mr. Randolph:

This refers to the meeting conducted at Callaway Plant on October 9, 2002. This meeting was related to two performance deficiencies that had been previously identified and inspected at Callaway Plant (NRC Inspection Reports 50-483/01-09 and 50-483/02-07). Supplemental inspections for both issues were conducted in February and August 2002 (NRC Inspection Reports 50-483/02-08 and -09). The topics discussed included descriptions of the performance deficiencies, your proposed corrective actions, NRC assessment of the corrective actions to date, and future NRC actions planned related to these performance deficiencies.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter will be placed in the NRC's Public Document Room.

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,

  
Ken E. Brockman, Director  
Division of Reactor Projects

Enclosures:

1. Attendance List
2. NRC Presentation
3. Licensee Presentation

cc:

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19041 Raines Drive  
Derwood, Maryland 20855

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Regulatory Affairs Supervisor  
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Manager - Electric Department  
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Ronald A. Kucera, Deputy Director  
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Otto L. Maynard, President and  
Chief Executive Officer  
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Dan I. Bolef, President  
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## REGULATORY PERFORMANCE MEETING ATTENDANCE

<b>LICENSEE/FACILITY</b>	Ameren UE / Callaway Plant
<b>DATE/TIME</b>	October 9, 2002; 2:00 p.m.
<b>LOCATION</b>	Emergency Operations Facility - Callaway Plant
<b>NAME (PLEASE PRINT)</b>	<b>ORGANIZATION</b>
John Schnack	AmerenUE
Mike Taylor	Ameren UE
John McGraw	Ameren UE
Jim Peery	Ameren UE
Scott Clardy	Mo. Dept. of Health & Senior Services
JOE LAUX	AmerenUE
Colin E. Suchland	The Fulton Sun
Garry L. Randolph	Ameren UE
PAUL R. HEIBERGER	AMEREN UE
Scott Sandbothe	Ameren UE
Jack Flory	Columbia Trib
MARK REDMEYER	Ameren UE
TIM HERRMANN	AMERENUE

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<b>NAME (PLEASE PRINT)</b>	<b>ORGANIZATION</b>
John PATTERSON	Ameren
DAVID VETERER	AMERENUE
Ron Roselius	Ameren UE
Steve Hogan	Ameren UE
JANE BEETEM	DEPT. OF NATURAL RESOURCES
Kathy Carroll	AmerenUE
Eric Olson	AmerenUE
Lana Jacobs	AmerenUE
GARY Tichelkamp	AmerenUE
Jessie Jones	Ameren UE
DAVID S. HOLLABAUGH	Ameren UE
Scott Maglio	AmerenUE
Vern McSaffie	Ameren UE

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<b>NAME (PLEASE PRINT)</b>	<b>ORGANIZATION</b>
David Gram	NRC Riv Board Chief
John David Hanna	NRC - Resident Inspector
Ken Brakman	NRC - Division Director Reactor Projects
Garry Randolph	Senior-Vice President and Chief Nuclear Officer
Ron Affler	Vice President - Nuclear
Mike Evans	Manager Nuclear Engineering
John Blosser	Manager - Regulatory Affairs



# **REGULATORY PERFORMANCE MEETING**



**NUCLEAR REGULATORY COMMISSION  
REGION IV**

# Meeting Agenda

1. Introductions and Opening Remarks
2. Performance Deficiencies
3. Corrective Actions
4. Assessment
5. Regulatory Action Matrix
6. Callaway Action Matrix
7. Licensee Response
8. Closing Remarks



# NRC Personnel

Ken Brockman	Director, Division of Reactor Projects
David Graves	Chief, Project Branch B Division of Reactor Projects
John Hanna	Resident Inspector Callaway Plant



**Exhibit 5 - ACTION MATRIX**

	Licensee Response Column	Regulatory Response Column	Degraded Cornerstone Column	Multiple/ Repetitive Degraded Cornerstone Column	Unacceptable Performance Column
<b>RESULTS</b>	All Assessment Inputs (Performance Indicators (PIs) and Inspection Findings) Green; Cornerstone Objectives Fully Met	One or Two White Inputs (in different cornerstones) in a Strategic Performance Area; Cornerstone Objectives Fully Met	One Degraded Cornerstone (2 White Inputs or 1 Yellow Input) or any 3 White Inputs in a Strategic Performance Area; Cornerstone Objectives Met with Moderate Degradation in Safety Performance	Repetitive Degraded Cornerstone; Multiple Degraded Cornerstones; Multiple Yellow Inputs; or 1 Red Input; Cornerstone Objectives Met with Longstanding Issues or Significant Degradation in Safety Performance	Overall Unacceptable Performance; Plants Not Permitted to Operate Within this Band; Unacceptable Margin to Safety
<b>RESPONSE</b>	Regulatory Performance Meeting	None	Branch Chief (BC) or Division Director (DD) Meet with Licensee	DD or Regional Administrator (RA) Meet with Licensee	Commission meeting with Senior Licensee Management
	Licensee Action	Licensee Corrective Action	Licensee root cause evaluation and corrective action with NRC Oversight	Licensee cumulative root cause evaluation with NRC Oversight	
	NRC Inspection	Risk-Informed Baseline Inspection Program	Baseline and supplemental inspection procedure 95001	Baseline and supplemental inspection procedure 95002	Baseline and supplemental inspection procedure 95003
	Regulatory Actions	None	Supplemental inspection only	Supplemental inspection only	-10 CFR 2.204 DFI -10 CFR 50.54(f) Letter - CAL/Order Order to Modify, Suspend, or Revoke Licensed Activities
<b>COMMUNICATION</b>	Assessment Letters	BC or DD review/sign assessment report (w/ inspection plan)	DD review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan)
	Annual Public Meeting	SRI or BC Meet with Licensee	BC or DD Meet with Licensee	RA (or designee) Discuss Performance with Licensee	EDO Discuss Performance with Senior Licensee Management
	Commission Involvement	None	None	None	Plant discussed at AARM Commission Meeting with Senior Licensee Management
INCREASING SAFETY SIGNIFICANCE →					

Note 1 The regulatory actions for plants in the Multiple/Repetitive Degraded Cornerstone column are not mandatory agency actions. However, the regional office should consider each of these regulatory actions when significant new information regarding licensee performance becomes available.

# Performance Deficiencies

- **INOPERABLE ESSENTIAL SERVICE WATER TRAIN 'B'**

Inadequate foreign material exclusion controls resulted in one train of the essential service water system being inoperable.

- **INOPERABLE AUXILIARY FEEDWATER SYSTEM PUMP**

Failure to identify and correct a risk significant condition adverse to quality caused an auxiliary feedwater pump to malfunction.

- **SUBSTANTIVE CROSSCUTTING ISSUE in the area of PROBLEM IDENTIFICATION AND RESOLUTION.**

The inspectors identified a number of examples that were indicative of problem identification and resolution deficiencies.



# Corrective Actions

## INOPERABLE ESSENTIAL SERVICE WATER TRAIN 'B'

- Revised Foreign Material Exclusion procedures
- Installed screens, grating, and special hose connections to all drains and openings in ESW pump house
- The inspectors concluded that the corrective actions were properly prioritized.

## INOPERABLE AUXILIARY FEEDWATER SYSTEM PUMP

- A series of programmatic and procedural enhancements to improve weaknesses in the corrective action program.
- Review of adequacy of root cause determinations
- Repair of the Condensate Storage Tank seal.



# Assessment

Supplemental Inspection (95002) related to the essential service water system was completed in March 2002.

Supplemental Inspection (95002) related to the auxiliary feedwater system was completed in August 2002.

Planned inspections to review further corrective actions.



## Callaway Action Matrix

	Calendar Year 2000		Calendar Year 2001				Calendar Year 2002			
	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Cornerstone	7/1/00 - 9/30/00	10/1/00 - 12/31/00	1/1/01 - 3/31/01	4/1/01 - 6/30/01	7/1/01 - 9/30/01	10/1/01 - 12/31/01	1/1/02 - 3/31/02	4/1/02 - 6/30/02	7/1/02 - 9/30/02	10/1/02 - 12/31/02
Initiating Events	Green	Green	Green	Green	Green	Green	Green	Green	N/A	N/A
Mitigating Systems	Green	Green	Green	White <sup>1</sup> (6/4/01)	White Continued	White Continued	White Continued	Green	N/A	N/A
							White <sup>5</sup> (2/27/02)	White <sup>5</sup> Continued	White <sup>5</sup> Continued	White <sup>5</sup> Continued
Barrier Integrity	Green	Green	Green	Green	Green	Green	Green	Green	N/A	N/A
Emergency Preparedness	Green	Green	Green	Green	Green	Green	Green	Green	N/A	N/A
Occupational Radiation Safety	White <sup>2</sup> (9/5/00)	White Continued	White Continued	White Continued	Green	Green	Green	Green	N/A	N/A
	White <sup>3</sup> (9/5/00)	White Continued	White Continued	White Continued						
	White <sup>4</sup> (9/5/00)	White Continued	White Continued	White Continued						
Public Radiation Safety	Green	Green	Green	Green	Green	Green	Green	Green	N/A	N/A
Physical Protection	Green	Green	Green	Green	Green	Green	Green	Green	N/A	N/A
Action Matrix	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Degraded Cornerstone	Regulatory Response	Regulatory Response	Degraded Cornerstone	Regulatory Resonse		

Dates in parenthesis are exit dates for the findings

- 1.) Essential service water pump inoperable
- 2.) Failure to maintain radiation doses as low as reasonably achievable
- 3.) Failure to maintain radiation doses as low as reasonably achievable
- 4.) Failure to maintain radiation doses as low as reasonably achievable
- 5.) Auxiliary feedwater system inoperable due to degraded CST co

# LICENSEE RESPONSE

# Closing Remarks





**NRC Regulatory Performance Meeting**

**Callaway Plant**

**October 9, 2002**



# Essential Service Water Corrective Actions

- **Screens installed to prevent foreign material from entering pump bays**
- **Controls for leak collection devices evaluated and enhanced**
- **Condition of the Essential Service Water System evaluated.**

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# Auxiliary Feedwater System Corrective Actions

- Floating cover removed from tank
  
- Corrective Action Program revised
  - Prompt Operability Determinations
  - Prompt dedication of resources for significant conditions
  - Prompt completion of significant root cause determinations
  
- Enhanced Corrective Action Program metrics

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# Problem Identification & Resolution

- Essential for our business in order to produce electricity in a SAFE, reliable, and cost effective manner
- Foundation of the NRC's Reactor Oversight Process (ROP)
- We have taken a critical look at ourselves to understand the extent of the issue
- We are committed to improvement.

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# What We Are Doing

Performance Improvement organization was established November 2001 to improve the effectiveness of:

- Corrective Action Program
- Human Performance
- Operating Experience
- Self Assessment

Sustained performance improvement and industry leadership are our goals.

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