



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
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March 2, 2006

Charles D. Naslund, Senior Vice  
President and Chief Nuclear Officer  
Union Electric Company  
P.O. Box 620  
Fulton, MO 65251

SUBJECT: ANNUAL ASSESSMENT LETTER - CALLAWAY PLANT  
(NRC INSPECTION REPORT 05000483/2006001)

Dear Mr. Naslund:

On February 7, 2006, the NRC staff completed its performance review of the Callaway Plant. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2005. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include physical protection information. A separate letter designated and marked as "Official Use Only - Security-Related Information" will include the physical protection review and resultant inspection plan.

Overall, the Callaway Plant operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, as well as for the first three quarters of the assessment cycle, was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process baseline inspections at your facility.

In our March 2, 2005, annual assessment letter and as updated in our August 30, 2005, midcycle assessment letter, we informed you of a substantive crosscutting issue in human performance, which principally involved personnel errors that had an impact on plant equipment from preventable events and transients. These errors stemmed from instances of failing to follow procedures and from inadequate procedures. The NRC recognizes that progress has been made by AmerenUE in addressing human performance issues, particularly with respect to procedure implementation, as measured by the an overall decrease in the human performance error rate. However, the NRC has noted that continuing problems have occurred with procedural and instruction adequacy, including those procedures that have been enhanced as part of your improvement initiatives in this area, as well as instructions developed during the past year. The procedural improvements and instructions developed over the last year have not been fully effective in preventing human performance errors, which indicates that further

improvement in addressing this issue is warranted. There were multiple Green findings affecting the Initiating Events and Mitigating Systems cornerstones. Examples include an inadequate operations procedure that contributed to a reactor trip signal and an unplanned auxiliary feedwater actuation while shut down, an inadequate surveillance procedure that resulted in the inadvertent isolation of all plant fire water suppression, an unplanned reactor trip that occurred because of an inadequate work instruction for work on a power supply, and inadequate instructions involving the conduct of continuous fire watches. Some of these examples involved upgraded procedures or an instruction that was developed this past year.

Accordingly, the NRC will continue to focus inspection activities within this area in order to assess the effectiveness of your improvement initiatives in reducing operational events and conditions caused by inadequate procedures and instructions. The NRC will use, in part, as its basis for closure, an assessment of the number of findings that are identified involving procedural adequacy problems and whether the plant staff recognizes and corrects procedure and work instruction problems before the plant is challenged. The NRC's review will be accomplished as a followup inspection item in accordance with applicable baseline inspection procedures. Additionally, because this substantive crosscutting issue has been open for more than two assessment letters, the NRC requests that a public meeting be held to discuss AmerenUE's progress in addressing the adequacy of human performance at the Callaway Plant. We will coordinate with your staff to schedule this meeting.

The enclosed inspection plan details the inspections, except those related to physical protection, scheduled through September 30, 2007. Routine resident inspections are not listed due to their ongoing and continuous nature. In addition to the baseline inspections, the NRC will also be conducting inspections related to Temporary Instruction 2515/150, "Reactor Pressure Vessel Head Penetration Nozzles (NRC Order EA-03-009)." The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. The inspections in the last 9 months of the inspection plan are tentative and may be revised at the midcycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at 817-860-8141 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

William B. Jones, Chief  
Project Branch B  
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Docket: 50-483  
License: NPF-30

Enclosure:  
Callaway Plant Inspection/Activity Plan

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SUNSI Review Completed:   \_wbj\_\_\_ADAMS:  Yes     No    Initials:   \_wbj  
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2/22/06	2/23/06	2/27/06	2/28/06	2/28/06

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**Callaway**  
**Inspection / Activity Plan**  
**03/01/2006 - 09/30/2007**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>RP-ORS - OCCUPATIONAL RADIATION SAFETY</b>		<b>1</b>			
1	IP 7112101	Access Control to Radiologically Significant Areas		04/03/2006	04/07/2006	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		04/03/2006	04/07/2006	Baseline Inspections
1	IP 71151	Performance Indicator Verification		04/03/2006	04/07/2006	Baseline Inspections
	<b>EP2 - EMERG PREP PROGRAM</b>		<b>2</b>			
1	IP 7111402	Alert and Notification System Testing		05/15/2006	05/19/2006	Baseline Inspections
1	IP 7111403	Emergency Response Organization Augmentation Testing		05/15/2006	05/19/2006	Baseline Inspections
1	IP 7111404	Emergency Action Level and Emergency Plan Changes		05/15/2006	05/19/2006	Baseline Inspections
1	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		05/15/2006	05/19/2006	Baseline Inspections
1	IP 71151	Performance Indicator Verification		05/15/2006	05/19/2006	Baseline Inspections
	<b>RP-ORS - OCCUPATIONAL RADIATION SAFETY</b>		<b>1</b>			
1	IP 7112101	Access Control to Radiologically Significant Areas		08/28/2006	09/01/2006	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		08/28/2006	09/01/2006	Baseline Inspections
1	IP 71151	Performance Indicator Verification		08/28/2006	09/01/2006	Baseline Inspections
	<b>EB2-52B - CAL PIR INSPECTION</b>		<b>3</b>			
1	IP 71152B	Identification and Resolution of Problems		10/16/2006	10/20/2006	Baseline Inspections
1	IP 71152B	Identification and Resolution of Problems		10/30/2006	11/03/2006	Baseline Inspections
	<b>EB2-05T - TRIENNIAL FIRE PROTECTION</b>		<b>5</b>			
1	IP 7111105T	Fire Protection [Triennial]		11/13/2006	11/17/2006	Baseline Inspections
1	IP 7111105T	Fire Protection [Triennial]		11/27/2006	12/01/2006	Baseline Inspections
	<b>RP-ORS - OCCUPATIONAL RADIATION SAFETY</b>		<b>1</b>			
1	IP 7112101	Access Control to Radiologically Significant Areas		10/23/2006	10/27/2006	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		10/23/2006	10/27/2006	Baseline Inspections
1	IP 71151	Performance Indicator Verification		10/23/2006	10/27/2006	Baseline Inspections
	<b>EB1-21 - CDB PART 1</b>		<b>7</b>			
1	IP 7111121	Component Design Bases Inspection		12/11/2006	12/15/2006	Baseline Inspections
	<b>REQUAL - BIENNIAL REQUAL</b>		<b>2</b>			
1	IP 7111111B	Licensed Operator Requalification Program		01/08/2007	01/12/2007	Baseline Inspections
	<b>EB1-21 - CDB PART 2</b>		<b>6</b>			
1	IP 7111121	Component Design Bases Inspection		01/02/2007	01/12/2007	Baseline Inspections
	<b>TI - 150 - RPV AND VHP NOZZLES</b>		<b>2</b>			
1	IP 2515/150	Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC ORDER EA-03		04/15/2007	05/10/2007	Safety Issues
	<b>PR-ORS - OCCUPATIONAL RADIATION SAFETY</b>		<b>1</b>			
1	IP 7112101	Access Control to Radiologically Significant Areas		04/16/2007	04/20/2007	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		04/16/2007	04/20/2007	Baseline Inspections

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

**Callaway**  
**Inspection / Activity Plan**  
**03/01/2006 - 09/30/2007**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	<b>PR-ORS - OCCUPATIONAL RADIATION SAFETY</b>		<b>1</b>			
1	IP 71151	Performance Indicator Verification		04/16/2007	04/20/2007	Baseline Inspections
	<b>EB1-08P - ISI</b>		<b>1</b>			
1	IP 7111108P	Inservice Inspection Activities - PWR		04/23/2007	05/04/2007	Baseline Inspections
	<b>RP TEAM - RADIATION SAFETY TEAM</b>		<b>5</b>			
1	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		06/04/2007	06/08/2007	Baseline Inspections
1	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		06/04/2007	06/08/2007	Baseline Inspections
1	IP 7112202	Radioactive Material Processing and Transportation		06/04/2007	06/08/2007	Baseline Inspections
1	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Pr		06/04/2007	06/08/2007	Baseline Inspections
	<b>EB2-07B - HEAT SINK INSPECTION</b>		<b>2</b>			
1	IP 7111107B	Heat Sink Performance		06/18/2007	06/22/2007	Baseline Inspections
	<b>EB1-2/17 - 50.59 &amp; PERMANENT PLANT MODS</b>		<b>3</b>			
1	IP 7111102	Evaluation of Changes, Tests, or Experiments		07/23/2007	07/27/2007	Baseline Inspections
1	IP 7111117B	Permanent Plant Modifications		07/23/2007	07/27/2007	Baseline Inspections
	<b>EP1 - EMERG PREP EXERCISE</b>		<b>2</b>			
1	IP 7111401	Exercise Evaluation		08/06/2007	08/10/2007	Baseline Inspections
1	IP 7111404	Emergency Action Level and Emergency Plan Changes		08/06/2007	08/10/2007	Baseline Inspections
1	IP 71151	Performance Indicator Verification		08/06/2007	08/10/2007	Baseline Inspections
	<b>BRQ SIM - BIENNIAL RQ SIM ONLY</b>		<b>1</b>			
1	IP 7111111B	Licensed Operator Requalification Program		08/20/2007	08/24/2007	Baseline Inspections
	<b>RP-ORS - OCCUPATIONAL RADIATION SAFETY</b>		<b>1</b>			
1	IP 7112101	Access Control to Radiologically Significant Areas		08/27/2007	08/31/2007	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		08/27/2007	08/31/2007	Baseline Inspections
1	IP 71151	Performance Indicator Verification		08/27/2007	08/31/2007	Baseline Inspections
	<b>EXAM - INITIAL EXAM</b>		<b>3</b>			
1	X02355	CALLAWAY - INITIAL EXAM (10/07)		09/10/2007	09/14/2007	Not Applicable