

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
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ARLINGTON, TEXAS 76011-4125

September 1, 2010

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

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN –  
CALLAWAY PLANT

Dear Mr. Heflin:

On August 10, 2010, the NRC staff completed its performance review of Callaway Plant. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from July 1, 2009 through June 30, 2010. 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 security information. A separate letter designated and marked as "Official Use Only—Security-Related Information" will include the security cornerstone review and resultant inspection plan.

Overall, 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 was within the Regulatory Response column of the NRC's Action Matrix based on the Mitigating Systems Performance Index – Emergency AC Power performance indicator being classified as having low to moderate safety significance (White) in the mitigating system cornerstone. This White performance indicator initially crossed the Green-White threshold in the first quarter of 2010 and was discussed in our assessment follow-up letter dated May 5, 2010. A failure of the Train A emergency diesel generator during a planned 24 hour surveillance run on March 30, 2010, combined with a previous run failure on December 24, 2008, resulted in the White performance indicator.

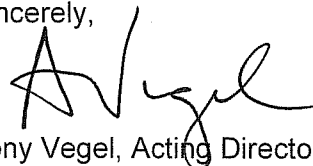
On July 14, 2010, we were notified by your staff of your readiness for the NRC to conduct a supplemental inspection to review the actions taken to address the White performance indicator. Therefore we are conducting a supplemental inspection using Inspection Procedure 95001, "Inspection for One or Two White Inputs In a Strategic Performance Area," at the site this week. This inspection procedure is conducted to provide assurance that the root causes and contributing causes of risk significant performance issues are understood, the extent of condition and cause are identified, and the corrective actions are sufficient to prevent recurrence.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through December 31, 2011. 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. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle 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 the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Geoffrey Miller at 817-860-8141 with any questions you may have regarding this letter or the inspection plan.

Sincerely,



Tony Vogel, Acting Director  
Division of Reactor Projects

Docket Nos. 50-483  
License Nos. NPF-30

Enclosure: Callaway Plant Inspection, Activity Plan

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SUNSI Rev Compl.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	ADAMS	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Reviewer Initials	RWD
Publicly Avail	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sensitive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sens. Type Initials	RWD
RIV/SPE/DRP/B	C:DRP/B	D:DRS	D:DRP		
RWDDeese	GBMiller	RJCaniano	AVegel		
/RA/	/RA/	/RA/	/RA/		
8/19/10	8/19/10	8/ /10	8/ /10		

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**Callaway**  
**Inspection / Activity Plan**  
 09/01/2010 - 12/31/2011

Unit Number	Planned Start	Planned End	Inspection Activity	Title	No. of Staff on Site
1	09/13/2010	09/17/2010	<b>EP-1 - BIENNIAL EP PROGRAM INSPECTION</b>		2
			IP 7111402	Alert and Notification System Testing	
			IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
			IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	09/13/2010	09/17/2010		Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	09/13/2010	09/17/2010		Drill/Exercise Performance	
1	09/13/2010	09/17/2010		ERO Drill Participation	
1	09/13/2010	09/17/2010		Alert & Notification System	
1	08/30/2010	09/03/2010	<b>IP 95001 - 95001 FOR WHITE MSP1 - EMERGENCY AC PI</b>	Supplemental Inspection For One Or Two White Inputs In A Strategic Performance Area	2
			IP 95001		
1	09/20/2010	09/24/2010	<b>RP45 - RADIATION SAFETY</b>	Occupational Dose Assessment	2
			IP 71124.04		
1	09/20/2010	09/24/2010	<b>TSB-52B - BIENNIAL PI&amp;R</b>	Radiation Monitoring Instrumentation	5
			IP 71124.05		
1	10/18/2010	10/22/2010	<b>EXAM - INITIAL OPERATOR EXAM</b>	Identification and Resolution of Problems	6
			IP 71152B	Identification and Resolution of Problems	
1	01/10/2011	01/14/2011		INITIAL EXAM - CALLAWAY (01/2011)	
1	02/07/2011	02/18/2011	<b>EB1-21 - COMPONENT DESIGN BASIS INSPECTION</b>	INITIAL EXAM - CALLAWAY (01/2011)	1
			X02463		
			X02463		
1	02/07/2011	03/07/2011	<b>EP1 - BIENNIAL EP EXERCISE INSPECTION</b>	Component Design Bases Inspection	3
			IP 7111401	Exercise Evaluation	
1	05/09/2011	05/13/2011		Emergency Action Level and Emergency Plan Changes	
			IP 7111404		
1	05/09/2011	05/13/2011		Drill/Exercise Performance	
1	05/09/2011	05/13/2011		ERO Drill Participation	
1	05/09/2011	05/13/2011		Alert & Notification System	
1	05/23/2011	05/27/2011	<b>RP678 - RADIATION SAFETY TEAM</b>	Radiocative Gaseous and Liquid Effluent Treatment	3
			IP 71124.06		
1	05/23/2011	05/27/2011		Radiological Environmental Monitoring Program	
			IP 71124.07		
1	05/23/2011	05/27/2011	<b>RS12 - RADIATION SAFETY</b>	Radiocative Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	2
			IP 71124.08		
1	10/17/2011	10/21/2011		Radiological Hazard Assessment and Exposure Controls	
			IP 71124.01		
1	10/17/2011	10/21/2011		Occupational ALARA Planning and Controls	
			IP 71124.02		
1	10/17/2011	10/21/2011		Occupational Exposure Control Effectiveness	
			IP 71151-OR01		

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

Callaway  
Inspection / Activity Plan  
09/01/2010 - 12/31/2011

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1	10/17/2011 10/21/2011	RS12 - RADIATION SAFETY IP 71151-PP01	RETS/ODCM Radiological Effluent	2

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