



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
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.

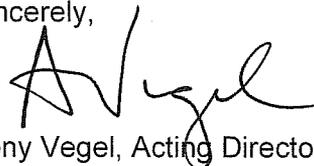
On July 14, 2010, we were notified by your staff of your readiness for the NRC to conduct a supplemental inspection to review the actions taken to address the White performance indicator. Therefore we are conducting a supplemental inspection using Inspection Procedure 95001, "Inspection for One or Two 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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R:_Reactors\EOC and Midcycle\Midcycle Assessment Letters\2010

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	EP-1 IP 7111402	Alert and Notification System Testing	2
1	09/13/2010	09/17/2010	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	09/13/2010	09/17/2010	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	09/13/2010	09/17/2010	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	09/13/2010	09/17/2010	IP 71151-EP01	Drill/Exercise Performance	
1	09/13/2010	09/17/2010	IP 71151-EP02	ERO Drill Participation	
1	09/13/2010	09/17/2010	IP 71151-EP03	Alert & Notification System	
1	08/30/2010	09/03/2010	IP 95001 IP 95001	- 95001 FOR WHITE MSP1 - EMERGENCY AC PI Supplemental Inspection For One Or Two White Inputs In A Strategic Performance Area	2
1	09/20/2010	09/24/2010	RP45 IP 71124.04	- RADIATION SAFETY Occupational Dose Assessment	2
1	09/20/2010	09/24/2010	IP 71124.05	Radiation Monitoring Instrumentation	
1	10/18/2010	10/22/2010	TSB-52B IP 71152B	- BIENNIAL PI&R Identification and Resolution of Problems	5
1	11/01/2010	11/05/2010	IP 71152B	Identification and Resolution of Problems	
1	01/10/2011	01/14/2011	EXAM X02463	- INITIAL OPERATOR EXAM INITIAL EXAM - CALLAWAY (01/2011)	6
1	02/07/2011	02/18/2011	X02463	INITIAL EXAM - CALLAWAY (01/2011)	
1	02/07/2011	03/07/2011	EB1-21 IP 7111121	- COMPONENT DESIGN BASIS INSPECTION Component Design Bases Inspection	1
1	05/09/2011	05/13/2011	EP1 IP 7111401	- BIENNIAL EP EXERCISE INSPECTION Exercise Evaluation	3
1	05/09/2011	05/13/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	05/09/2011	05/13/2011	IP 71151-EP01	Drill/Exercise Performance	
1	05/09/2011	05/13/2011	IP 71151-EP02	ERO Drill Participation	
1	05/09/2011	05/13/2011	IP 71151-EP03	Alert & Notification System	
1	05/23/2011	05/27/2011	RP678 IP 71124.06	- RADIATION SAFETY TEAM Radioactive Gaseous and Liquid Effluent Treatment	3
1	05/23/2011	05/27/2011	IP 71124.07	Radioactive Environmental Monitoring Program	
1	05/23/2011	05/27/2011	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1	10/17/2011	10/21/2011	RS12 IP 71124.01	- RADIATION SAFETY Radiological Hazard Assessment and Exposure Controls	2
1	10/17/2011	10/21/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1	10/17/2011	10/21/2011	IP 71151-OR01	Occupational Exposure Control Effectiveness	

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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This report shows only on-site and announced inspection procedures.