

## UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV 611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-4005

March 2, 2007

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 05000483/2007001)

Dear Mr. Naslund:

On February 8, 2007, the NRC staff completed its performance review of the Callaway Plant. Our technical staff reviewed performance indicators for the most recent quarter and inspection results for the period from January 1 through December 31, 2006. 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 was within the Regulatory Response column of the NRC's Action Matrix. While all inspection findings had very low safety significance (Green), there was one White performance indicator in the Mitigating Systems cornerstone. Specifically, the current quarter results for the Mitigating Systems Performance Index (MSPI) for the Heat Removal System is White. A supplemental inspection was conducted in accordance with Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," and was completed in October 2006. That inspection concluded that your staff had performed a comprehensive evaluation that identified the three primary root causes for the degraded reliability of the auxiliary feedwater system. We concluded that the root cause, extent of condition, and extent of cause evaluations were performed with adequate detail and rigor to provide assurance that the corrective actions were appropriate.

Additionally, the NRC staff identified a substantive crosscutting issue in the problem identification and resolution area at Callaway Plant. There were 14 findings related to the corrective action program component of the problem identification and resolution area. Eleven of these findings had a common theme related to the failure of site personnel to thoroughly evaluate problems. These findings occurred in the Mitigating Systems and Barrier Integrity Cornerstones. Several of the findings were related to the quality of engineering work in evaluating problems and the interface between operations and engineering personnel.

Examples of the engineering organization's failure to thoroughly evaluate problems include several inadequate operability evaluations primarily involving degraded equipment, an inadequate 50.59 evaluation, a failure to identify the high point of a discharge line when implementing modifications to correct emergency core cooling system voiding issues, and performance of an inadequate procedure change as corrective action following discovery of emergency operation procedure deficiencies.

We understand that you have taken actions in the past to address deficiencies in your corrective action program and that you intend to reassess your past corrective actions and develop new actions to address this issue. These actions are in the early stage of implementation and have not yet proven effective. As a result, this substantive crosscutting issue will remain open until we determine, through the implementation of focused baseline inspections, that corrective actions implemented in accordance with your improvement plan have been effective.

As documented in our assessment letter, dated August 31, 2006 (ML062430640), we closed a substantive crosscutting issue in human performance on the basis of concluding that the actions taken to address both procedure implementation and procedural adequacy problems have been effective in decreasing the human performance error rate. While there were more than three Green inspection findings with documented crosscutting aspects in human performance associated with a crosscutting theme involving inadequate procedures or work instructions, we continue to find that your ongoing actions in this area are of sufficient scope and have been effective in improving performance. Therefore, we have concluded that our basis for closure of the issue during the 2006 midcycle assessment remains valid.

The enclosed inspection plan details the inspections, except those related to physical protection, scheduled through September 30, 2008. In addition to the baseline inspection program, we plan to conduct Temporary Instruction 150, "Reactor Pressure Vessel Head and Vessel Head Penetrations Nozzles," and Temporary Instruction 166, "Pressurized Water Reactor Containment Sump Blockage." The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspectors' arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. 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 <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a> (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 Vincent Gaddy at 817-860-8141 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

Arthur T. Howell III, Director Division of Reactor Projects

Docket: 50-483 License: NPF-30

Enclosure:

Callaway Plant Inspection/Activity Plan

cc w/enclosure: Professional Nuclear Consulting, Inc. 19041 Raines Drive Derwood, MD 20855

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Callaway Inspection / Activity Plan 01/01/2007 - 09/30/2008

Baseline Inspections 08/31/2007 Baseline Inspections 09/14/2007 Baseline Inspections Baseline Inspections Baseline Inspections Baseline Inspections Inspection Type Safety Issues Safety Issues Not Applicable Safety Issues 01/12/2007 05/10/2007 10/05/2007 04/06/2007 10/05/2007 04/20/2007 05/04/2007 04/27/2007 06/08/2007 08/10/2007 10/26/2007 04/20/2007 04/27/2007 04/27/2007 06/08/2007 07/27/2007 08/10/2007 10/05/2007 06/08/2007 06/08/2007 07/27/2007 08/10/2007 Planned Dates Start End 01/02/2007 38/27/2007 04/02/2007 04/15/2007 09/10/2007 04/23/2007 07/23/2007 10/01/2007 04/16/2007 04/16/2007 04/23/2007 04/23/2007 34/23/2007 36/04/2007 06/04/2007 06/04/2007 )6/04/2007 07/23/2007 38/06/2007 38/06/2007 38/06/2007 10/01/2007 0/01/2007 10/22/2007 No. of Staff on Site Q S m N 9 Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control F Pressurized Water Reactor Containment Sump Blockage [NRC GENERIC LETTER 2004-0; Pressurized Water Reactor Containment Sump Blockage [NRC GENERIC LETTER 2004-0/ Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC ORDER EA-03 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems Radiation Monitoring Instrumentation and Protective Equipment Emergency Action Level and Emergency Plan Changes Radioactive Material Processing and Transportation Access Control to Radiologically Significant Areas Access Control to Radiologically Significant Areas Title - OCCUPATIONAL RADIATION SAFETY-ACCESS - OCCUPATIONAL RADIATION SAFETY- ALARA Evaluation of Changes, Tests, or Experiments Licensed Operator Requalification Program Component Design Bases Inspection Inservice Inspection Activities - PWR Inservice Inspection Activities - PWR CALLAWAY - INITIAL EXAM (10/07) Performance Indicator Verification **50.59 & PERMANENT PLANT MODS** Performance Indicator Verification Performance Indicator Verification Permanent Plant Modifications ALARA Planning and Controls ALARA Planning and Controls RADIATION SAFETY TEAM Heat Sink Performance **EMERG PREP EXERCISE** - RPV AND VHP NOZZLES **HEAT SINK INSPECTION** Exercise Evaluation **BIENNIAL REGUAL** - INITIAL EXAM - CDB PART 2 - ISI & TI 166 nspection Activity IP 7111108P P 7111108P IP 711111B IP 711117B IP 7111107B IP 2515/166 IP 2515/166 IP 2515/150 IP 7112102 IP 7112201 IP 7112202 IP 7111102 P 7111404 IP 7112103 IP 7112203 IP 7112101 IP 7111121 IP 7112101 IP 7111401 IP 7112102 RP TEAM RP-ORS5 X02355 RP-ORS4 IP 71151 **EB1-2/17 EB1-08P** IP 71151 REQUAL EB2-07B IP 71151 1- 150 EB1-21 EXAM EP1 Number Unit

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

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Inspection / Activity Plan 01/01/2007 - 09/30/2008 Callaway

Unit			No. of Staff	Planned Dates	Dates	Inspection
Number	Inspection Activity	Vity	on Site	Start	End	Type
	EXAM - II	- INITIAL EXAM	9			-
_	X02355	CALLAWAY - INITIAL EXAM (10/07)		11/26/2007	11/26/2007 12/01/2007 Not Applicable	Not Applicable
	EB2-12T - T	- TRIENNIAL MAINTENANCE RULE INSPECTION	-			
-	IP 7111112B	Maintenance Effectiveness		03/24/2008	03/28/2008	Baseline Inspections
	RP-0RS1 - C	- OCCUPATIONAL RADIATION SAFETY - ALARA	-			
-	IP 7112101	Access Control to Radiologically Significant Areas		04/14/2008	04/18/2008	Baseline Inspections
-	IP 7112102	ALARA Planning and Controls		04/14/2008	04/18/2008	Baseline Inspections
-	IP 71151-OR01	Occupational Exposure Control Effectiveness		04/14/2008	04/18/2008	Baseline Inspections
	IP 71151-PR01	RETS/ODCM Radiological Effluent		04/14/2008	04/18/2008	Baseline Inspections
	EB2-52B - E	- BIENNIAL PI&R INSPECTION	-			
<b>-</b>	IP 71152B	Identification and Resolution of Problems		04/21/2008	04/25/2008	04/21/2008 04/25/2008 Baseline Inspections
<del></del>	IP 71152B	Identification and Resolution of Problems		05/05/2008	05/09/2008	Baseline Inspections
	EP2 - E	- EP PROGRAM	-			
<b>—</b>	IP 7111402	Alert and Notification System Testing		08/11/2008	08/15/2008	08/15/2008 Baseline Inspections
_	IP 7111403	Emergency Response Organization Augmentation Testing		08/11/2008	08/15/2008	Baseline Inspections
-	IP 7111404	Emergency Action Level and Emergency Plan Changes		08/11/2008	08/15/2008	Baseline Inspections
-	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		08/11/2008	08/15/2008	Baseline Inspections
Ψ-	IP 71151-EP01	Drill/Exercise Performance		08/11/2008	08/15/2008	Baseline Inspections
<b>.</b>	IP 71151-EP02	ERO Drill Participation		08/11/2008	08/15/2008	Baseline Inspections
-	IP 71151-EP03	Alert & Notification System		08/11/2008	08/15/2008	Baseline Inspections

Regional Administrator (BSM1)

DRP Director (ATH)

DRS Director (DDC)

DRS Deputy Director (RJC1)

Senior Resident Inspector (MSP)

Branch Chief, DRP/B (VGG)

Senior Project Engineer, DRP/B (FLB2)

Team Leader, DRP/TSS (FLB2)

RITS Coordinator (MSH3)

V. Dricks, PAO (VLD)

W. Maier, RSLO (WAM)

L. Owen, RA Secretary (LAO)

DRS Branch Chiefs (WBJ, ATG, LJS, MPS1)

- C. Miller, Chief, TRPS, OEDO (CGM)
- S. Richards, Deputy Director, DIRS, NRR (SAR)
- J. Lubinski, Deputy Director, DORL, NRR (JWL)
- C. Haney, Director, DORL, NRR (CXH)
- D. Terao, Chief, PLB IV, DORL, NRR (DXT)
- J. Donohew, Project Manager for Callaway (JND)

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SUNSI Review Completed:  ☑ Publicly Available □			Initials: _VGG		
R:\ REACTORS\EOC and Midcycle\EOC Assessment Letters\2006 - dated 3-2-07\CWY.wpd					
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