



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION IV  
1600 E LAMAR BLVD  
ARLINGTON, TX 76011-4511

August 31, 2016

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

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR CALLAWAY PLANT  
(REPORT 05000483/2016005)**

Dear Mr. Diya:

On August 9, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Callaway Plant. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2015 through June 30, 2016. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

The NRC determined that overall, Callaway Plant operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Callaway Plant during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., Green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through June 30, 2018. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the second half of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," and Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." The NRC conducted audits of licensee efforts towards compliance with these Orders, and the information gathered will aid staff in development of the ultimate Safety Evaluation for the site. After the NRC staff receives the Final Compliance letter for the site, the Safety Evaluation will be issued. Then, the NRC staff

F. Diya

- 2 -

will confirm through inspections the full implementation of the orders mentioned above by performing Temporary Instruction 191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

In Staff Requirements Memorandum – SECY 16-0009, "Recommendations Resulting from the Integrated Prioritization and Re-Baselining of Agency Activities," the Commission approved the NRC staff recommendation to discontinue the formal mid-cycle assessment process beginning in calendar year 2017. This will be the final mid-cycle assessment letter. The staff will continue to conduct quarterly assessment meetings and communicate changes in the assessment of licensee performance in accordance with the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program."

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

Please contact me at 817-200-1141 with any questions you have regarding this letter.

Sincerely,

*/RA/*

Nicholas H. Taylor, Chief  
Projects Branch B  
Division of Reactor Projects

Docket No. 50-483  
License No. NPF-30

Enclosure:  
Callaway Plant Inspection/Activity Plan

Page 1 of 2

08/30/2016 09:32:44

Report 22

**Callaway**  
**Inspection / Activity Plan**  
**07/01/2016 - 06/30/2018**

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
		<b>BASELINE - PLANT MODS</b>		<b>1</b>
1	01/01/2016 12/31/2016	IP 7111101-Imminent	Adverse Weather (Site/Imminent)	
		<b>EB1-07T - CWY HEAT SINK PERFORMANCE</b>		<b>1</b>
1	09/26/2016 09/30/2016	IP 7111107T	Heat Sink Performance	
		<b>RS 24 - RADIATION SAFETY</b>		<b>3</b>
1	11/07/2016 11/11/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1	11/07/2016 11/11/2016	IP 71124.04	Occupational Dose Assessment	
		<b>EP-1 - EP PERFORMANCE INDICATORS</b>		<b>1</b>
1	11/14/2016 11/18/2016	IP 71151-EP01	Drill/Exercise Performance	
1	11/14/2016 11/18/2016	IP 71151-EP02	ERO Readiness	
1	11/14/2016 11/18/2016	IP 71151-EP03	Alert & Notification System Reliability	
		<b>EP-2 - BIENNIAL EP PROGRAM INSPECTION</b>		<b>1</b>
1	11/14/2016 11/18/2016	IP 7111402	Alert and Notification System Testing	
1	11/14/2016 11/18/2016	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	11/14/2016 11/18/2016	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	11/14/2016 11/18/2016	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
		<b>ISFSI - ROUTINE INSPECTION (ONE WEEK IN MONTH)</b>		<b>1</b>
1	02/01/2017 02/28/2017	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
		<b>EXAM - INIT EXAM</b>		<b>4</b>
1	08/14/2017 08/18/2017	X02591	INITIAL EXAM CALLAWAY (09/2017)	
1	09/11/2017 09/15/2017	X02591	INITIAL EXAM CALLAWAY (09/2017)	
		<b>RS 5678 - RS TEAM</b>		<b>5</b>
1	02/27/2017 03/03/2017	IP 71124.05	Radiation Monitoring Instrumentation	
1	02/27/2017 03/03/2017	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1	02/27/2017 03/03/2017	IP 71124.07	Radiological Environmental Monitoring Program	
1	02/27/2017 03/03/2017	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
		<b>EP-2 - BIENNIAL EP EXERCISE INSPECTION</b>		<b>4</b>
1	04/24/2017 04/28/2017	IP 7111401	Exercise Evaluation	
1	04/24/2017 04/28/2017	IP 7111404	Emergency Action Level and Emergency Plan Changes	
		<b>EP-3 - EP PERFORMANCE INDICATOR VERIFICATION</b>		<b>1</b>
1	04/24/2017 04/28/2017	IP 71151-EP01	Drill/Exercise Performance	
1	04/24/2017 04/28/2017	IP 71151-EP02	ERO Readiness	
1	04/24/2017 04/28/2017	IP 71151-EP03	Alert & Notification System Reliability	

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

Enclosure

Page 2 of 2

08/30/2016 09:32:44

Report 22

**Callaway**  
**Inspection / Activity Plan**  
**07/01/2016 - 06/30/2018**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>BRQ - BIENNIAL REQUAL INSPECTION</b>		<b>3</b>
1	06/12/2017	06/16/2017	IP 7111111B	Licensed Operator Requalification Program	
			<b>EB1-21M - CWY COMPONENT DESIGN BASES INSPECTION</b>		<b>6</b>
1	07/31/2017	09/01/2017	IP 7111121M	Component Design Bases Inspection (Teams)	
			<b>RS 12 PI - RADIATION SAFETY</b>		<b>3</b>
1	10/16/2017	10/20/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	10/16/2017	10/20/2017	IP 71124.02	Occupational ALARA Planning and Controls	
1	10/16/2017	10/20/2017	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	10/16/2017	10/20/2017	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
			<b>71111.08 - INSERVICE INSPECTION RFO22</b>		<b>1</b>
1	10/16/2017	10/27/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>EP-1 - EP PROGRAM INSPECTION</b>		<b>1</b>
1	04/23/2018	04/27/2018	IP 7111402	Alert and Notification System Testing	
1	04/23/2018	04/27/2018	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	04/23/2018	04/27/2018	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	04/23/2018	04/27/2018	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	04/23/2018	04/27/2018	IP 71151-EP01	Drill/Exercise Performance	
1	04/23/2018	04/27/2018	IP 71151-EP02	ERO Readiness	
1	04/23/2018	04/27/2018	IP 71151-EP03	Alert & Notification System Reliability	

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

Enclosure

will confirm through inspections the full implementation of the orders mentioned above by performing Temporary Instruction 191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

In Staff Requirements Memorandum – SECY 16-0009, "Recommendations Resulting from the Integrated Prioritization and Re-Baselining of Agency Activities," the Commission approved the NRC staff recommendation to discontinue the formal mid-cycle assessment process beginning in calendar year 2017. This will be the final mid-cycle assessment letter. The staff will continue to conduct quarterly assessment meetings and communicate changes in the assessment of licensee performance in accordance with the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program."

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

Please contact me at 817-200-1141 with any questions you have regarding this letter.

Sincerely,

*/RA/*

Nicholas H. Taylor, Chief  
 Projects Branch B  
 Division of Reactor Projects

Docket No. 50-483  
 License No. NPF-30

Enclosure:  
 Callaway Plant Inspection/Activity Plan

DISTRIBUTION:  
 See next page

**ADAMS ACCESSION NUMBER: ML16237A033**

<input checked="" type="checkbox"/> SUNSI Review By:		ADAMS <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive	Keyword: NRC-002
OFFICE: RIV	SPE:DRP/B	D: DRS	D: DRP	C: DRP/B		
NAME	DProulx	AVegel	TWPruett	NTaylor		
SIGNATURE	<i>/RA/</i>	<i>/RA Jeff Clark for/</i>	<i>/RA/</i>	<i>/RA/</i>		
DATE	8/22/16	8/22/16	8/23/16	8/23/16		

**OFFICIAL RECORD COPY**

Letter to Fadi Diya from Nicholas H. Taylor dated August 31, 2016

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR CALLAWAY PLANT  
(REPORT 05000483/2016005)

DISTRIBUTION:

Regional Administrator (Kriss.Kennedy@nrc.gov)  
Deputy Regional Administrator (Scott.Morris@nrc.gov)  
DRP Director (Troy.Pruett@nrc.gov)  
DRP Deputy Director (Ryan.Lantz@nrc.gov)  
DRS Director (Anton.Vegel@nrc.gov)  
DRS Deputy Director (Jeff.Clark@nrc.gov)  
Senior Resident Inspector (Thomas.Hartman@nrc.gov)  
Resident Inspector (Michael.Langelier@nrc.gov)  
Branch Chief, DRP/B (Nick.Taylor@nrc.gov)  
Senior Project Engineer, DRP/B (David.Proulx@nrc.gov)  
Project Engineer, DRP/B (Steven.Janicki@nrc.gov)  
Administrative Assistant (Dawn.Yancey@nrc.gov)  
Public Affairs Officer (Victor.Dricks@nrc.gov)  
Project Manager (John.Klos@nrc.gov)  
Team Leader, DRS/IPAT (Thomas.Hipschman@nrc.gov)  
RITS Coordinator (Marisa.Herrera@nrc.gov)  
ACES (R4Enforcement.Resource@nrc.gov)  
Regional Counsel (Karla.Fuller@nrc.gov)  
Technical Support Assistant (Loretta.Williams@nrc.gov)  
Congressional Affairs Officer (Jenny.Weil@nrc.gov)  
RIV Congressional Affairs Officer (Angel.Moreno@nrc.gov)  
RIV/ETA: OEDO (Jeremy.Bowen@nrc.gov)  
RIV RSLO (Bill.Maier@nrc.gov)  
Director, DIRS, NRR (Chris.Miller@nrc.gov)  
Deputy Director, DIRS, NRR (Shana.Helton@nrc.gov)  
Director, DORL, NRR (Anne.Boland@nrc.gov)  
Deputy Director, DORL, NRR (George.Wilson@nrc.gov)  
Director, NSIR (Brian.Holian@nrc.gov)  
Director, DPR, NSIR (Marissa.Bailey@nrc.gov)  
DRP Branch Chiefs (R4DRPBC@nrc.gov)  
DRS Branch Chiefs (R4DRSBC@nrc.gov)  
ROPreports.Resource@nrc.gov  
ROPassessment.Resource@nrc.gov