



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

September 1, 2011

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 16, 2011, the 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, 2010, through June 30, 2011. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This performance review and enclosed inspection plan do not include security information. A separate letter will include the NRC's assessment of your performance in the Security Cornerstone and its security-related inspection plan.

Overall, Callaway Plant operated in a manner that preserved public health and safety and fully 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.

In the days following the Fukushima Dai-ichi nuclear accident in Japan, the Commission directed the staff to establish a senior-level agency task force to conduct a methodical and systematic review of the NRC's processes and regulations to determine whether the agency should make additional improvements to its regulatory system. The NRC has since completed Temporary Instruction (TI) 183, "Follow-up to Fukushima Dai-ichi Nuclear Station Fuel Damage Event," and TI-184, "Availability and Readiness Inspection of Severe Accident Management Guidelines (SAMGs)" at your facility. Results of these inspections can be found here: <http://www.nrc.gov/japan/japan-activities.html>. Additionally, on May 11, 2011, the agency issued NRC Bulletin 2011-01, "Mitigating Strategies," to confirm compliance with Order EA-02-026, subsequently imposed license conditions, and 10 CFR 50.54(hh)(2), and to determine the status of licensee mitigating strategies programs. On July 12, 2011, the NRC's Task Force made its recommendations to the Commission in its report, "Recommendations for Enhancing Reactor Safety in the 21st Century: The Near-Term Task Force Review of Insights

from the Fukushima Dai-ichi Accident." The Commission is currently reviewing the Task Force's recommendations to determine whether additional actions may be warranted.

The enclosed inspection plan lists the inspections scheduled through December 31, 2012. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months 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. Of note, the NRC plans to conduct Temporary Instruction 2515/177 Inspection, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," during the 2011 calendar year.

From July 1, 2010, to June 30, 2011, the NRC issued four Severity Level IV traditional enforcement violations in the same area (violations that may impact the ability of the NRC to perform its regulatory oversight functions). Therefore, the NRC plans to conduct Inspection Procedure 92723, "Follow Up Inspection for Three or More Severity Level IV Traditional Enforcement Violations in the Same Area in a 12-Month Period," to follow-up on these violations. This inspection procedure is conducted to provide assurance that the root and contributing causes of multiple traditional enforcement violations are understood, the extent of condition and extent of cause are identified, and the corrective actions are sufficient to address the identified causes.

In accordance with 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 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).

Please contact me at 817-860-8141 with any questions you have regarding this letter.

Sincerely,



Geoffrey B. Miller, Chief
Reactor Projects Branch B
Division of Reactor Projects

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

Enclosure:
Callaway Plant Inspection Plan
cc: Distribution via ListServ

The Honorable Steve Wherle
Mayor of Rhineland
P.O. Box 384
Rhineland, MO 65069

Callaway
 Inspection / Activity Plan
 09/01/2011 - 12/31/2012

| Unit Number | Planned Dates Start | Planned Dates End | Inspection Activity | Title | No. of Staff on Site |
|-------------|---------------------|-------------------|--|--|----------------------|
| 1 | 09/12/2011 | 09/16/2011 | TI-177 - GAS ACCUMULATION IN ECCS, RHR, & CS | Managing Gas Accumulation In Emergency Core Cooling, Decay Heat Removal & Containment Spray System | 1 |
| 1 | 10/17/2011 | 10/28/2011 | PSB2-08P - INSERVICE INSPECTION | Inservice Inspection Activities - PWR | 3 |
| 1 | 10/17/2011 | 10/21/2011 | RS12 - RADIATION SAFETY | Radiological Hazard Assessment and Exposure Controls | 2 |
| 1 | 10/17/2011 | 10/21/2011 | IP 71124.01 | Occupational ALARA Planning and Controls | |
| 1 | 10/17/2011 | 10/21/2011 | IP 71124.02 | Occupational Exposure Control Effectiveness | |
| 1 | 10/17/2011 | 10/21/2011 | IP 71151-OR01 | RETS/ODCM Radiological Effluent | |
| 1 | 10/17/2011 | 10/21/2011 | IP 71151-PR01 | | |
| 1 | 04/16/2012 | 04/20/2012 | EB2-05T - TRIENNIAL FIRE PROTECTION INSPECTION | Fire Protection-NFPA 805 Transition Period [Triennial] | 4 |
| 1 | 04/30/2012 | 05/04/2012 | IP 7111105P | Fire Protection-NFPA 805 Transition Period [Triennial] | |
| 1 | 04/23/2012 | 04/27/2012 | RS34 - RADIATION SAFETY | In-Plant Airborne Radioactivity Control and Mitigation | 2 |
| 1 | 04/23/2012 | 04/27/2012 | IP 71124.03 | Occupational Dose Assessment | |
| 1 | 06/10/2012 | 06/14/2012 | TSB-52B - BIENNIAL P&R INSPECTION | Problem Identification and Resolution | 4 |
| 1 | 06/24/2012 | 06/30/2012 | IP 71152B | Problem Identification and Resolution | |
| 1 | 07/09/2012 | 07/13/2012 | RS12MCA - RADIATION SAFETY | Radiological Hazard Assessment and Exposure Controls | 2 |
| 1 | 07/09/2012 | 07/13/2012 | IP 71124.01 | Occupational ALARA Planning and Controls | |
| 1 | 07/09/2012 | 07/13/2012 | IP 71124.02 | Occupational Exposure Control Effectiveness | |
| 1 | 07/09/2012 | 07/13/2012 | IP 71151-OR01 | RETS/ODCM Radiological Effluent | |
| 1 | 07/09/2012 | 07/13/2012 | IP 71151-PR01 | | |
| 1 | 09/10/2012 | 09/14/2012 | EP-1 - BIENNIAL EP PROGRAM INSPECTION | Alert and Notification System Testing | 1 |
| 1 | 09/10/2012 | 09/14/2012 | IP 7111402 | Emergency Preparedness Organization Staffing and Augmentation System | |
| 1 | 09/10/2012 | 09/14/2012 | IP 7111403 | Emergency Action Level and Emergency Plan Changes | |
| 1 | 09/10/2012 | 09/14/2012 | IP 7111404 | Correction of Emergency Preparedness Weaknesses and Deficiencies | |
| 1 | 09/10/2012 | 09/14/2012 | IP 7111405 | Drill/Exercise Performance | |
| 1 | 09/10/2012 | 09/14/2012 | IP 71151-EP01 | ERO Drill Participation | |
| 1 | 09/10/2012 | 09/14/2012 | IP 71151-EP02 | Alert & Notification System | |
| 1 | 09/10/2012 | 09/14/2012 | IP 71151-EP03 | | |

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