



June 7, 2011

ULNRC-05798

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

Ladies and Gentlemen:

**DOCKET NUMBER 50-483  
CALLAWAY PLANT UNIT 1  
UNION ELECTRIC CO.  
FACILITY OPERATING LICENSE NPF-30  
2009 ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT**

Reference: Ameren letter ULNRC-05702, dated April 30, 2010.

The referenced letter transmitted to the NRC the 2009 Annual Radiological Environmental Operating Report (AREOR) for Callaway Plant. Please find enclosed a revision to page 5 of this report.

The enclosed revision documents that samples were unable to be obtained from two vegetation sampling locations for the Radiological Environmental Monitoring Program in July 2009. Documentation of these missing samples was inadvertently omitted from Section 3.3 of the 2009 AREOR submitted in the referenced letter.

This error was discovered during the May 2011 NRC inspection of the Radiological Environmental Monitoring Program and has been documented and addressed in the Callaway Plant Corrective Action Program.

This revision to the 2009 AREOR is submitted in accordance with Section 5.6.2 of the Callaway Plant Technical Specifications and Appendix B to the Callaway Plant Operating License.

ULNRC-05798

June 7, 2011

Page 2

This letter does not contain new commitments.

If there are any questions, please contact us.

Sincerely,

A handwritten signature in black ink that reads "Scott Maglio". The signature is written in a cursive style with a large, sweeping flourish at the end.

Scott Maglio  
Regulatory Affairs Manager

Enclosed: Revised Page 5 of the 2009 Callaway Plant AREOR

ULNRC-05798

June 7, 2011

Page 3

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3.2. Program Description (continued)

Another pathway considered is direct ambient gamma radiation. This exposure is monitored by thermoluminescent dosimeters (TLDs), at forty-three locations in and around the Callaway site. The TLDs are placed in 16 sectors around the plant as specified in the ODCM-RECS. Three locations are designated as controls (IDM-26, IDM-27 and IDM-60). TLDs are placed at each location and exchanged and analyzed quarterly.

To monitor the terrestrial environment, soil is collected annually from seven indicator locations (F2, PR3, F6, PR7, W2, W3, and W4) and two control locations (V3, W1). The samples are analyzed for gamma-emitting isotopes. Results of supplemental soil testing are included in Part II, App. C.

3.3. Program Execution

The program was executed as described in the preceding section with the following exceptions.

(1) Surface Water:

Surface water samples are composites of daily collections by automatic river sampler at two locations, S01 and S02. For 2009, down-time for the sampler at S01 was 35 hours (0.4%); the sampler at S02 was out of service for 544 hours (6.2%).

(2) Groundwater:

Gamma spectroscopic analysis was missed for nine groundwater sites in the first quarter, 2009. The collector was not aware of new requirements for the REMP. Most of the samples have been subsequently analyzed, though not all required LLDs could be met.

Excavation for a new essential service water pipeline blocked access to well #937E. No samples were available during the first quarter, 2009. Sampling was resumed in the second quarter.

No sample was available for October, 2009, for well 936. The well was under water due to large amounts of rain and inoperability of the groundwater sump. The water table rose sufficiently to submerge the flush-finished well.

(3) Milk:

Milk samples were not available from location M-06 after April, 2009, due to the death of the dairy owner.

Milk was available from location M-10 for the period of May through September, 2009. The goats were pregnant during January- April and did not provide milk. The station withdrew from the program in October, 2009. (4) Fish:

Fish, collected July 16, 2009, was sampled 29 days beyond the +/- 25% grace period. Flooding on the Missouri River created unsafe river conditions and delayed the collection.

4) Fish:

Fish, collected July 16, 2009, was sampled 29 days beyond the +/- 25% grace period. Flooding on the Missouri River created unsafe river conditions and delayed the collection.

(5) Direct Radiation:

TLDs for locations IDM-23 and IDM-31A were missing for the 3rd quarter, 2009. Vandalism is suspected. The TLDs were replaced for the 4th quarter.

(6) Vegetable:

There were no vegetable samples available from environmental sampling locations CA-FPL-V9 and CA-FPL-V14 for month of July, 2009. Each provider's garden was no longer producing due to heat and lack of rain.