



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV  
612 EAST LAMAR BLVD, SUITE 400  
ARLINGTON, TEXAS 76011-4125

April 22, 2010

Mr. Adam C. Heflin, Senior Vice  
President and Chief Nuclear Officer  
AmerenUE  
P.O. Box 620  
Fulton, MO 65251

SUBJECT: CALLAWAY NUCLEAR POWER PLANT – NOTIFICATION OF INSPECTION  
(NRC INSPECTION REPORT 05000483/2010003) AND REQUEST FOR  
INFORMATION

Dear Mr. Heflin:

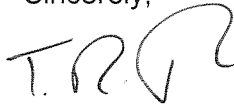
On June 7-18, 2010, Reactor Inspectors from NRC's Region IV office will perform the baseline inspection of heat sink performance and changes, tests, experiments, and permanent plant modifications at Callaway Nuclear Power Plant, using NRC Inspection Procedure 71111.07, "Heat Sink Performance", and NRC Inspection Procedure 71111.17, "Evaluations of Changes, Tests, Experiments, and Permanent Plant Modifications."

Experience has shown that this inspection is resource intensive both for the NRC inspectors and your staff. In order to minimize the impact to your onsite resources and to ensure a productive inspection, we have enclosed a request for documents needed for this inspection. Upon review of these documents, the inspectors will select additional documentation for review upon arrival. It is important that all of these documents are up to date and complete in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be Steve Petzel of your regulatory affairs organization. If there are any questions about this inspection or the material requested, please contact the lead inspector James Adams at (817) 860-8294 or by email [James.Adams@nrc.gov](mailto:James.Adams@nrc.gov).

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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).

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Farnholtz', with a stylized flourish at the end.

Thomas Farnholtz, Chief  
Engineering Branch 1  
Division of Reactor Safety

Docket: 50-483  
License: NPF-30

Enclosure:  
Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications and Heat  
Exchanger Performance Document Request

cc w/enclosure:  
Mr. Luke H. Graessle  
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Manager, Protective Services  
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Jefferson City, MO 65102-0360

Dru Buntin  
Director of Government Affairs  
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P.O. Box 176  
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Mr. Rick A. Muench, President and  
Chief Executive officer  
Wolf Creek Nuclear Operating Corporation  
P.O. Box 411  
Burlington, KS 66839

Kathleen Logan Smith, Executive Director and  
Kay Drey, Representative, Board of Directors  
Missouri Coalition for the Environment  
6267 Delmar Boulevard, Suite 2E  
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Presiding Commissioner  
Callaway County Court House  
10 East Fifth Street  
Fulton, MO 65251

Director, Missouri State Emergency  
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P.O. Box 116  
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Chief, Technological Hazards Branch  
FEMA Region VII  
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Kansas City, MO 64114-3372

Mr. Scott Clardy, Administrator  
Section for Disease Control  
Missouri Department of Health and  
Senior Services  
P.O. Box 570  
Jefferson City, MO 65102-0570

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Certrec Corporation  
4200 South Hulen, Suite 422  
Fort Worth, TX 76109

Mr. Keith G. Henke, Planner II  
Division of Community and Public Health  
Office of Emergency Coordination  
Missouri Department of Health and  
Senior Services  
930 Wildwood Drive  
P.O. Box 570  
Jefferson City, MO 65102

## **Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications Heat Sink Performance**

Inspection Dates: June 7-18, 2010

Inspection Procedures: IP 71111.07 "Heat Sink Performance"

IP 71111.17 "Evaluation of Changes, Tests, or Experiments and Permanent Plant Modifications"

Inspectors: James Adams, Reactor Inspector, Lead Inspector  
Theresa Buchanan, Reactor Inspector  
Abin Fairbanks, Reactor Inspector  
Dustin Reinert, Reactor Inspector

### **Information Requested for the In-Office Preparation Week**

The following information should be sent to the Region IV office in hard copy or electronic format (Certrec database preferred), in care of James Adams, by May 31, 2010, to facilitate the selection of specific items that will be reviewed during the onsite inspection week. The inspectors will select specific items from the information requested below and then request from your staff additional documents needed during the onsite inspection weeks. We ask that the specific items requested be available and ready for review on the first day of inspection. Also, we request that you categorize the documents in your response with the numbered list below. Please provide requested documentation electronically if possible. If requested documents are large and only hard copy formats are available, please inform the inspector(s), and provide subject documentation during the first day of the onsite inspection. If you have any questions regarding this information request, please call the lead inspector as soon as possible.

### **Inspection Procedure 71111.07**

Prior to May 31, 2010, the inspectors will contact your regulatory affairs organization with the sample of two to four heat exchangers and/or heat sinks that will be selected for the inspection. Once the inspectors select the inspection sample, they will be requesting the following information for the selected sample:

1. Callaway Nuclear Power Plant responses and commitments to NRC Generic Letter 89-13.
2. Heat exchanger test program/procedures, including the specific heat exchanger testing and cleaning procedures for each selected heat exchanger.
3. FSAR sections for selected heat exchangers.
4. Biofouling/chemistry control program/procedures for selected heat exchangers.

5. Operations training manual sections and design basis notebooks for the selected heat exchangers.
6. Vendor specifications and recommendations for selected heat exchangers. This should include data that can be used to determine design heat transfer coefficient and determine vendor recommended maintenance.
7. Design heat transfer coefficient and fouling factors for selected heat exchangers.
8. Water hammer evaluations for selected heat exchangers (if performed).
9. System health reports for the selected heat exchangers.
10. Test/Inspection results and reports covering the last 3 years for the selected heat exchangers.
11. Trended performance for the selected heat exchangers.
12. System flow balance test results of the selected heat exchangers for last 3 years.
13. Any applicable eddy current tests for the selected heat exchangers.
14. If any selected heat exchanger systems are scheduled to be opened during the onsite week, the team would like to observe the interior of the system.
15. A list of corrective maintenance performed in the last 3 years for the selected heat exchangers.
16. A list of corrective action documents issued in the last 3 years for the selected heat exchangers.

#### **Inspection Procedure 71111.17**

1. A list with descriptions, of all 50.59 screenings (or equivalent) performed since August 3, 2007, which did not result in an evaluation. Note: Description of screenings should be brief, but of sufficient detail that inspectors can determine the significance of the issue.
2. A list with descriptions, of all 10 CFR 50.59 evaluations performed which did not result in an application for license amendment to NRC from August 3, 2007, to the present. Note: Description of evaluations should be brief, but of sufficient detail so that inspectors can determine the significance of the issue.
3. Callaway Nuclear Power Plant procedure(s) for conducting 10 CFR 50.59 screenings and evaluations.
4. A list with descriptions of all Corrective Action documents related to 50.59 activities, including screenings and evaluations from August 3, 2007, to the present.

5. A list with descriptions of all permanent plant modifications dating from August 3, 2007. Include sufficient detail to enable the inspector to determine the significance of each modification. For this inspection, permanent plant modifications include permanent plant changes, design changes, setpoint changes, procedure changes, equivalency evaluations, suitability analyses, calculations, and commercial grade dedications.
6. Callaway Nuclear Power Plant procedure for implementing and controlling permanent plant modifications.
7. A list with descriptions, of all updates to the Callaway Nuclear Power Plant Final Safety Analysis Report performed per 10 CFR 50.71(e) from August 3, 2007, to the present. Note: Description of evaluations should be brief, but of sufficient detail that inspectors can determine the significance of the issue.
8. A list with descriptions of all Corrective Action documents related to your permanent plant modification program and its implementation since August 3, 2007. Include sufficient detail to enable the inspector to determine the significance of each modification.
9. A listing of personnel qualified to prepare 50.59 screenings and evaluations, including qualification dates.
10. A listing of personnel qualified to review and approve 50.59 screenings and/or evaluations, including qualification dates.

Inspector Contact Information:

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