

October 6, 2006

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Stop P1-137
Washington, DC 20555-0001

ULNRC05337



Ladies and Gentlemen:

**DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
UNION ELECTRIC CO.
FACILITY OPERATING LICENSE NPF-30
LICENSEE EVENT REPORT 2006-007-00
Unexpected Inoperability of 'A' Containment
Cooling System due to a Lack of Documentation.**

The enclosed licensee event report is submitted in accordance with 10CFR50.73(a)(2)(i)(B) and 50.73(a)(2)(v)(D) to report an unexpected inoperability of the 'A' Containment Cooling System due to a lack of documentation.

This letter does not contain new commitments.

Sincerely,

A handwritten signature in black ink that reads "L. E. Thibault".

L. E. Thibault
Director Plant Operations

LET/DWG/slk
Enclosure

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*(Certrec receives ALL attachments
as long as they are non-safeguards
and public disclosed).*

Send the following without attachments:

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LICENSEE EVENT REPORT (LER)

Estimated burden per response to comply with this mandatory collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME Callaway Plant Unit 1	2. DOCKET NUMBER 05000483	3. PAGE 1 OF 5
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4. TITLE
Inoperability of A Containment Cooler longer than allowed by Technical Specifications

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
08	07	2006	2006	007 -	00	10	06	2006	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE Mode 1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: (Check all that apply)									
10. POWER LEVEL 100 %	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)						
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)						
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)						
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)						
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)						
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)						
<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)							
<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER							
<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A							

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME K.A. Mills, Supervising Engineer, Safety Analysis/Regional Regulatory Affairs	TELEPHONE NUMBER (Include Area Code) 573-676-4317
--	--

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
D	BK	CLR	A089	Y					

14. SUPPLEMENTAL REPORT EXPECTED				15. EXPECTED SUBMISSION DATE		
<input checked="" type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input type="checkbox"/> NO				MONTH	DAY	YEAR
				11	03	2006

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

The A Containment Cooler was determined to be inoperable for more than seven days during cycle 14 at Callaway Plant. Callaway Plant received NRC report "Callaway Plant - NRC Integrated Inspection Report 05000483/2006003," on August 7, 2006. The report stated the performance data for the Train A Containment Coolers did not demonstrate the Containment Coolers were capable of performing their required design bases function between August 16, 2005 and September 17, 2005 because of fouling. The Resident Inspectors independently performed calculations to verify operability of the Containment Coolers using a method different than that used by Callaway Engineering. The Resident Inspectors' calculations resulted in identifying a data point at which the cooling capacity of the Train A Containment Coolers was not within limits. The inside of the cooling coils of the A Containment Cooler was cleaned during Refuel 14 outage between September 21, 2005 and October 12, 2005. Because the as found differential pressure for the A Containment Cooler was not procedurally required to be measured and recorded prior to cleaning the cooling coils, Callaway Plant could not perform the calculations required to prove the past operability of the Train A Containment Coolers for the time period in question.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)
Callaway Plant Unit 1	05000483	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 5
		2006	- 007	- 00	

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

I. DESCRIPTION OF THE REPORTABLE EVENT

A. REPORTABLE EVENT CLASSIFICATION

50.73(a)(2)(i)B – Operation or Condition Prohibited by Technical Specifications.
50.73(a)(2)(v)D – Event or Condition that Could Have Prevented Fulfillment of a Safety Function:
Mitigate the Consequences of an Accident.

B. PLANT OPERATING CONDITIONS PRIOR TO THE EVENT

Mode 1, 100% Reactor Power

C. STATUS OF STRUCTURES, SYSTEMS OR COMPONENTS THAT WERE INOPERABLE AT THE START OF THE EVENT AND THAT CONTRIBUTED TO THE EVENT

No system, structures, or components were Inoperable at the start of this event which contributed to the event.

D. NARRATIVE SUMMARY OF THE EVENT, INCLUDING DATES AND APPROXIMATE TIMES

Callaway Plant received NRC report "Callaway Plant - NRC Integrated Inspection Report 05000483/2006003" on August 7, 2006. The report stated the performance data for the Train A Containment Coolers did not demonstrate the Containment Coolers were capable of performing their required design bases function during the time period between August 16, 2005 and September 17, 2005 due to fouling. The report further indicated the evaluation performed by Callaway Plant prior to returning the containment cooler to service is inadequate. Callaway Licensing and Engineering representatives met with one of the NRC Resident Inspectors on October 23, 2006 to discuss this issue plus the bases and calculations used to reach the Inspectors' conclusions on this issue. The Inspectors analyzed the performance and trending data for Cycle 14 associated with the Containment Coolers and independently performed calculations to verify operability of the Containment Coolers using a method different than that used by Callaway Engineering. The calculations resulted in identifying a data point at which the cooling capacity of the Train A Containment Coolers was not within limits.

Callaway Plant entered Refuel 14 on September 17, 2005. The inside of the cooling coils of the A Containment Cooler was cleaned during the Refuel 14 outage between September 21, 2005 and October 12, 2005. The cooler flow and as left differential pressure readings were measured and recorded after the coil cleaning was complete. However, the as found differential pressure was not measured and recorded prior to cleaning the cooling coils. Because the as found differential pressure for the A Containment Cooler was not procedurally required to be measured and recorded prior to cleaning the A Containment Cooler coils, Callaway Plant could not perform the calculations required to prove the past operability of the Train A Containment Coolers for the time period in question.

(Continued)

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)
Callaway Plant Unit 1	05000483	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 5
		2006	- 007	- 00	

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

This report is a preliminary report of this issue. A revision to this LER will be submitted to the NRC after an evaluation to determine the root cause of the inoperability of the A Containment Cooler has been completed.

E. METHOD OF DISCOVERY OF EACH COMPONENT, SYSTEM FAILURE, OR PROCEDURAL ERROR

Callaway Plant received NRC report "Callaway Plant - NRC Integrated Inspection Report 05000483/2006003" on August 7, 2006. The report stated the performance data for the Train A Containment Cooler did not demonstrate the containment cooler was capable of performing the required design bases function during the time period between August 16, 2005 and September 17, 2005 because of fouling. The report further indicated the evaluation, performed prior to returning the containment cooler to service, is inadequate.

II. EVENT DRIVEN INFORMATION

A. SAFETY SYSTEMS THAT RESPONDED

No safety system actuations occurred in this event.

B. DURATION OF SAFETY SYSTEM INOPERABILITY

The time period of the inoperability of the Train A Containment Coolers is from August 16, 2005 at 00:00 through September 17, 2005 at 19:50 when the plant entered mode 5 for refueling outage R14.

The duration of the inoperability was 31 days, 19 hours, and 50 minutes. Because it was not recognized that the Train A Containment Coolers were inoperable during this period of time, entry into applicable Technical Specification actions for the following conditions was not performed:

3.6.6.C One Containment Cooling train inoperable in MODES 1, 2, 3, or 4.
Restore Containment Cooling train to OPERABLE status within 7 days and 10 days from discovery of failure to meet the LCO.

3.6.6.D Required Action and associated Completion Time of Condition C not met in MODE 1, 2, 3, or 4.
Be in MODE 3 within 6 hours and Be in MODE 5 within 36 hours.

(Continued)

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)
Callaway Plant Unit 1	05000483	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	4 OF 5
		2006	- 007	- 00	

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

A review of Control Room Logs was performed to determine the operability of the Train B Containment Cooling System from August 16, 2005 at 00:00 through September 17, 2005 at 19:50. The Train B Containment Cooling System was found to be inoperable during the following time periods:

September 1, 2005 from 12:19 to 12:26 Train B Load Shed Emergency Load Sequencing inoperable due to surveillance testing.

September 6, 2005 from 00:15 to 00:38 Train B Essential Service Water inoperable due to surveillance testing.

September 7, 2005 from 02:27 to 02:51 Train B Essential Service Water inoperable due to surveillance testing.

September 8, 2005 from 08:43 to 09:27 Train B Emergency Diesel Generator inoperable due to maintenance work.

September 8, 2005 from 12:43 to 13:03 Train B Emergency Diesel Generator inoperable due to maintenance work.

September 13, 2005 from 14:10 to 15:13 Train B Essential Service Water inoperable due to surveillance testing.

Because both trains of the Containment Cooling System were inoperable during these time periods, entry into applicable Technical Specification action for the following condition was also missed:

3.6.6.E Two Containment Cooling trains inoperable in MODES 1, 2, 3, or 4.
Be in Mode 3 within 6 hours and Be in Mode 5 within 36 hours.

C. SAFETY CONSEQUENCES AND IMPLICATIONS OF THE EVENT.

The safety consequences of the inoperability of the Train A and B Containment Coolers were evaluated within the context of the Callaway PRA model.

The Callaway PRA large early release frequency (LERF) model credits the containment coolers for post-accident containment heat removal. However, the basic events representing failures of the containment coolers exist only in very low frequency LERF cutsets (scenarios). These cutsets are truncated from the LERF results during quantification. That is, their frequency of occurrence is below 1E-11 per year. Consequently, failure of the containment coolers has no appreciable impact on the calculated Callaway LERF. Therefore, the event described herein is of very low risk significance.

(Continued)

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)	
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		2006	- 007	- 00		

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

III. CAUSE(S) OF THE EVENT AND CORRECTIVE ACTION(S)

A root cause analysis team has been formed to evaluate the applicable data and determine the root cause of the inoperability of the A Containment Cooler and corrective actions to prevent recurrence. A revision to this report will be submitted with the results of this evaluation and any additional corrective actions.

The apparent cause of inoperability of the A Containment Cooler is the lack of documentation of the as found differential pressure of the Containment Coolers because of a procedure deficiency, which did not allow for validation of the past operability of the A Containment Cooler.

Corrective actions, which have been performed or are in progress, include:

- Cleaned the inside of the cooling coils of A Containment Cooler in Refuel 14.
- As found flow balance values for both Containment Cooler trains were found acceptable during Refuel 14.
- Continuing monthly trending of Containment Cooler flow values.
- Verified Containment Cooler flows did not degrade during Cycles 13 and 14.

Pending actions related to this issue include:

- Change surveillance procedure to record as found values for differential pressure of Containment Coolers prior to cleaning the coils.
- Reevaluate the required cooling capacity for accident conditions.
- Review and revise the current methodology to better predict Containment Cooler performance.

IV. PREVIOUS SIMILAR EVENTS

No previous similar events have been identified within the past three years.

V. ADDITIONAL INFORMATION

The system and component codes listed below are from the IEEE Standard 805-1984 and IEEE Standard 803A-1984 respectively.

System: BK
Component: CLR

The manufacturer of the replacement Containment Cooler coils is Aerofin Corporation.

Manufacturer's Code: A089