

Concern 1 Assigned To: RPBB

OI Action: No  
OI Report:

The licensee decided, due to economic reasons, to not correct a long standing design deficiency on the RHR suction relief valves' discharge piping during the spring 2007 refueling outage but wait until the next refueling outage.

Action	Branch	Assigned	Planned	Completed
1 Acknowledgement Letter	ACES	04/06/2007	05/06/2007	04/24/2007
2 Initial ARB Meeting RPBB to inspect all 3 concerns.	RPBB	04/06/2007	05/06/2007	04/17/2007
3 Staff Review Develop concerns list.	RPBB	04/06/2007		04/09/2007
4 Inspection RPBB to inspect all 3 Concerns.	RPBB	04/17/2007	05/17/2007	05/24/2007
5 Letter From Allegor Allegor faxed corrections to acknowledgment letter.	ACES			04/30/2007
6 Review Submittal Review allegor's letter.	RPBB	05/01/2007	05/08/2007	05/24/2007
7 Phone Call w/Allegor Called allegor with RPBB, EB1 & reactor analyst to discuss findings prior to licensee startup.	ACES			05/01/2007
8 Closure Letter	ACES	05/24/2007	06/24/2007	06/06/2007
9 Final QA Review	ACES	05/29/2007		06/06/2007
10 File Closed	ACES			06/06/2007
11 Review Submittal	RPBB	09/05/2007	09/12/2007	09/12/2007
12 Response after Closure Sent as acknowledgment letter to RIV-2007-A-0096.	ACES	09/06/2007	09/24/2007	11/07/2007
13 Followup ARB Meeting Contention 1: RPBB to review how we addressed all concerns in RIV-2007-A-0028 and bring back to special ARB. Contention 2: ACES/RPBB to contact allegor, to discuss previous NRC actions taken on this issue including basis for our conclusions and provide opportunity for the CI to provide additional information. Contention 3: ACES/RPBB to provide a written response that captures the information verbally provided by the resident inspector and provide an overall summary of the NRC's assessment.	ACES	09/06/2007	09/24/2007	09/24/2007

## 14 ARB Meeting

ACES 09/24/2007 09/27/2007 09/27/2007

- (1) ACES to assign new allegation number (RIV-2007-A-0096).
- (2) RPBB to draft violation and provide a copy to OI/ACES (planned completion date: 10/5/07).
- (3) OI to investigate -High Priority [Rationale- MD 8.8 exhibit 3, (B) (ii) (a)].
- (4) In parallel with the OI interview with alleged, ACES to discuss at Regional Panel, before discussing with OE to determine if we are opening a previous enforcement action. (Inspection Report 2007003, page 35, issued August 2, 2007)
- 5) RIV to do a self-asses

## 15 Related Allegations

ACES

11/07/2007

RIV-2007-A-0096

**From:** Richard W Deese  
**To:** Anton Vogel; Darrell White; David Dumbacher; Dwight Chamberlain; James Heller; Judith Walker; Karla Fuller; Michael Vasquez  
**Date:** 09/26/2007 1:38:02 PM  
**Subject:** Action from Monday's ARB

From the ARB, I was instructed to draft a written response of the overall summary of the NRC's assessment of the Callaway Plant's problem identification and resolution program to aid in answering the allegor's concerns outlined in his letter to Senator Durbin. I offer up the following. Please provide feedback/comments to me.

**CC:** Gaddy, Vincent

Chronology of Relevant Facts of the Callaway Employee's Allegation  
Pertaining to the October 2003 Reactor Shutdown Event

Event

In October 2003, after responding to the loss of an instrument bus, operators manipulated and/or allowed the plant to operate such that the Minimum Temperature for Criticality was exceeded. The plant shut down before the Technical Specification allowed time was exceeded. Control rods were left withdrawn for an extended period of time (around 90 minutes). The on-shift crew did not log the entry into the Technical Specification conditions nor did they initiate a corrective action program document, both of which were required by Callaway plant procedures at the time. The allegor asserts that these failures to report the conditions per procedure were intentional omissions.

Chronology (all dates are in 2007)

March 2      Allegation received

March 3-18    Concerns List developed. There were more than 2 concerns; only the pertinent ones are listed.

Concern 1

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On October 23, 2003, while shutting down to Mode 3, the RCS temperature dropped below the Minimum Temperature for Critical Operation. However, the temperature transient was not documented in a condition report until 38 days later when identified by a training instructor. This condition report did not address why the control rods were not inserted until 90 minutes following the reactor shutting down. A later condition report documenting the issue (CARS 200701278) was assigned a significance level 4. The concern individual (CI) expressed concern that this significance level was too low. The condition also was not documented in the shift supervisor log.

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Concern 2

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The operating crew waited 90 minutes to fully insert control rods following shutting down the reactor. The CI believes this delay may have been intentional to avoid scrutiny of crews actions, since the crew was supposed to maintain Mode 2 in case the equipment necessitating the shutdown was repaired. The CI states that purposefully delaying inserting the control rods, not logging entry into Technical Specifications and not documenting significant operational transients in the corrective action program are dishonest and negligent omissions.

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COMMENT: CONCERNS COULD BE MORE SPECIFIC. THEY SEEM SIMILAR.



March 19 Allegation discussed at ARB. The following was decided:

Concern 1: DRP-B to inspect  
 Concern 2: DRP-B to inspect non-willful aspects and identify any potential violations. Re-ARB to discuss OI followup of potential willfulness.

June 18 ARB to discuss results of DRP-B inspection of Concerns 1 and 2. Summarized as follows:

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11 ARB Meeting ACES 06/07/2007 06/11/2007 06/18/2007

To discuss whether there were indications of willfulness in Concern 2. - Based upon discussion with the Inspector(s) conducting review of the technical issue of Concern 2, the ARB did not find evidence of willful misconduct. In addition, the ARB concluded that there was no violation of regulatory requirements to warrant an OI investigation. RPBB to document review of issue more fully including whether failure to log entry into TS 3.4.2 or time to document issue in CAR violated an NRC requireme

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COMMENTS: A VIOLATION WAS TO BE WRITTEN FOR CONCERN 1. SINCE CONCERNS 1 & 2 WERE SIMILAR, THE VIOLATION WAS TANGIBLE TO BOTH.

THE SECOND TO LAST SENTENCE STATES THERE WAS NO VIOLATION, YET THE LAST SENTENCE APPEARS TO ASK DRP-B TO EXAMINE POSSIBILITY OF A VIOLATION.

June 19

E-mail from DRP-B to Senior Allegation Coordinator.

Allegation RIV-2007-A-0028 - Concern 2

The NRC inspector that was assigned Concern 2 came to the following conclusions based on interviews and reviewed plant technical data:

- The licensee failed to log the entry into Technical Specification Action Statement 3.4.2, the reactor critical below 551°F as required by their procedures. The inspector did not believe it was a willful act. His impression was that the operators didn't know what was actually going on. At the time the plant had experienced a loss of a vital bus and the operators had ramped power down to approximately 2 percent. Xenon then drove the temperature and neutron flux level down. The reactor went below the 551°F for about 15 minutes at which time the operators tripped the turbine as part of their shutdown procedure. This placed the steam dumps in service which regulated the temperature at 557°F.
- The inspector determined that the licensee did not violate any TS requirements.
- The inspector did not find any evidence that any licensee actions or omissions were willful.
- The licensee wrote a CAR and has taken corrective actions to preclude this from recurring.

COMMENTS: BULLET 3 - THE INSPECTOR DID NOT FIND EVIDENCE OF WILLFULNESS BECAUSE HIS DIRECTION PER ARB WAS TO INSPECT "NON-WILLFUL ASPECTS".

BULLET 4 - THE LICENSEE WROTE A CAR (39 DAYS LATER AND IT WAS THE TRAINING INSTRUCTOR). IT WAS NOT WRITTEN BY THE CROW - WHICH IS THE ALLEGOR'S POINT, AND THE CONTENTION OF HIS FIRST CONCERN IN HIS "DUBBIN" LETTER.

August 7      Closure Letter. Closure of Concerns 1 and 2 shown below:

#### Concern 1

On October 23, 2003, while shutting down to Mode 3, the RCS temperature dropped below the Minimum Temperature for Critical Operation. However, the temperature transient was not documented in a condition report until 38 days later when identified by a training instructor. This condition report did not address why the control rods were not inserted until 90 minutes following the reactor shutting down. A later condition report documenting the issue (CARS 200701278) was assigned a significance Level 4. The concern individual (CI) expressed concern that this significance level was too low. The condition also was not documented in the shift supervisor log.

#### Resolution 1 - Substantiated

In your letter dated April 20, 2007, you advised that on March 20, 2007, you presented CARS 200701278 to the Reactivity Management Review Committee and that the CARS significance was rescreened at Level 3.

The NRC reviewed computer point trend data, operator logs, Technical Specification requirements, corrective action documents and operator procedural guidance.

The October 23, 2003, plant transient resulted in RCS temperature decreasing approximately 2 degrees F. below the Technical Specification 3.4.2 minimum allowed RCS temperature while critical. Fifteen minutes late a mode change from Mode 2 (Startup) to Mode 3 (Hot Standby) occurred. This Technical Specification limiting condition for operation entry and mode change were not documented per requirements. The operators procedural guidance expected to be able to control RCS temperature and reactor power stable using control of steam loads to establish a reactor critical condition of about 5 E -8 amps. The reactor did become subcritical without immediate operator action and did transition through five decades of power decrease due to the transient in a 20-minute period. No attempts were made to restore power and after 2 hours, the procedural requirement to insert control rods was implemented. Thirty-eight days later a corrective action document (CAR) identified the discrepancy.

The licensee recently initiated CARs 200702601 and 200702606 which highlighted the need to re-review the 2003 event to ensure procedural content and operator training was adequate to respond to future events. These corrective action documents have been assigned significance Level 3 and the actions prescribed have the potential to address the 2003 inadequacies.

The concerns described in Allegation RIV- 2007-A-0028, and confirmed by inspection, were contrary to the requirements of the licensee's Technical Specification bases and operating procedures and were an initiating events reactor restart concern. The NRC plans to document this violation in NRC Inspection Report 2007-003.

COMMENT: LAST SENTENCE STATES INTENTION TO WRITE A VIOLATION. THE VIOLATION WAS TANGIBLE TO CONCERN 2.

Concern 2

The operating crew waited 90 minutes to fully insert control rods following shutting down the reactor. [The CI believes this delay may have been intentional to avoid scrutiny of the crew's actions, since the crew was supposed to maintain Mode 2 in case the equipment necessitating the shutdown was repaired. The CI states that purposefully delaying inserting the control rods, not logging entry into Technical Specifications and not documenting significant operational transients in the corrective action program are dishonest and negligent omissions.]

Resolution 2 – Partially Substantiated

The NRC technical staff reviewed computer point trend data, operator logs, Technical Specification requirements, corrective action documents and operator procedural guidance as they related to the first sentence of Concern 2. The technical staff also reviewed the information to determine whether there were indications of misconduct that would warrant an investigation by the Office of Investigations.

The technical staff determined that the reactor did become subcritical without immediate operator action and did transition through five decades of power decrease due to the transient in a 20-minute period. No attempts were made to restore power and after 2 hours, the procedural requirement to insert control rods was implemented. This time delay was not prudent and did suggest that the operators may not have exercised optimum reactivity management and may not have had adequate plant awareness. The inspector's review of operating procedures did not find any timeliness guidance on performing the steps to insert the control rods.

COMMENT: CONCERN IS NOT CLEAR, THEREFORE  
HARD TO RESOLVE. RESOLUTION ADDRESSES  
FIRST 2 SENTENCES, BUT DOES NOT THE  
LAST PARENTHETICAL SENTENCE.



August 15, 2007

Richard J. Durbin, United States Senator  
525 S. 8th Street  
Springfield, IL 62703

Dear Senator Durbin:

I am one of your constituents from Blessed Sacrament parish in Springfield. I am married to the former Miss Lori Becker (daughter of Barry Becker) and the next door neighbor of Ann and Doug Dougherty. I am an ardent supporter of nuclear power, having worked in the commercial nuclear industry in both Missouri and Illinois and having served five years as an officer in our nation's nuclear submarine force.

I am sure you are aware that although nuclear power is for the most part a safe and reliable way to generate electricity, the self sustaining nature of the nuclear reaction and the radioactivity of the fission products create inherent risks. The safe operation of reactor plants in the United States is ensured by a strong commitment to safety by the nuclear industry which is in turn ensured by an aggressive inspection program by the United States Nuclear Regulatory Commission.

Callaway Plant has a culture which discourages disagreement with upper management and which inhibits effective problem identification and resolution. The management of Callaway Plant would prefer not to know about problems and is reluctant to fully investigate them. I have brought this issue to the United States Nuclear Regulatory Commission on two separate occasions (Allegations RIV-2007-A-0028 and RIV-2007-A-0048). I am writing you because I am satisfied with neither the thoroughness of the investigations conducted by the United States Nuclear Regulatory Commission nor the penalties awarded Callaway Plant.

Although Callaway Plant is located in Missouri, this matter is of concern to you because:

- 1) I am one of your constituents and I do not know where in government to turn to with these issues now that the US NRC has not properly pursued them.
- 2) My concerns not only concern the performance of the management of Callaway Plant but also concern the performance of the US NRC which is, of course, an agency of our federal government and thereby is a national concern.
- 3) The poor performance of a nuclear plant anywhere in the country jeopardizes the public confidence in our eleven reactor plants in Illinois.

I have enclosed a computer disk with this letter. On the enclosed disk are the

RIV-2007-A-0028  
RIV-2007-A-0048

correspondence between me and the US NRC and copies of internal Callaway Action Requests (the process for reporting concerns to company leadership).

I have three concerns which are provided below.

I greatly appreciate your past commitments to public safety concerns and to the safe generation of nuclear power. Please let me know if you or your staff can provide me any assistance in resolving my concerns.

Very respectfully,

### Concern 1

On October 21, 2003 the operating crew at Callaway Plant lost control of reactivity and the plant inadvertently shut down. There appears to me to be strong evidence that the Shift Manager (in 2003 the title Shift Supervisor was used) left the control rods withdrawn for 90 minutes to avoid having to admit to upper management that his crew lost control of the reactor. I base this accusation on the following:

- 1) The crew did not document the inadvertent shutdown in the Operations log.
- 2) The crew did not document the inadvertent shutdown in the Callaway Action Request System.
- 3) None of the five current Shift Managers with whom I discussed this issue can give me a reason why the control rods would remain out for 90 minutes following the shut down.
- 4) The training supervisor who documented the pressurizer level transient from earlier in the shift received negative feedback from the Shift Manager regarding the need to document the transient in the CAR System.

The US NRC has refused to investigate whether or not the leaving of the control rods withdrawn was an intentional attempt to cover up a transient. Their position is that since the Callaway Plant procedure for conducting a reactor shutdown contains no time requirements, there was no misconduct that would warrant an investigation by the Office of Investigations.

I do not agree with their position. I have made an allegation regarding the integrity of individuals who hold US NRC issued Senior Reactor Operator licenses. The Shift Manager involved in the incident was later involved in an inadvertent Safety Injection (February 2004) which led to the failure of safety related relief valves on the Residual Heat Removal system and in a significant plant transient while synchronizing to the electric grid (November 2005) which, although it was clearly caused by operator error,



was blamed on newly installed equipment. This same Shift Manager has since been promoted to the Assistant Operations Manager for Performance Improvement. The other Senior Reactor Operators involved in the October 21, 2003 cover up are still active watchstanders. My allegation regarding the integrity of these individuals needs to either be substantiated or refuted by the Office of Investigations; it cannot be ignored.

Although the US NRC plans on documenting a finding on the 3rd quarter inspection report for Callaway, this is slight punishment. One's career should not be forwarded by covering up mistakes; it should be jeopardized. To not properly investigate an allegation of covering up a transient and, if substantiated, to not properly punish such cover-up sends the wrong message to Senior Reactor Operators who are under pressure from the company to operate error free. Error free operation should be accomplished by learning from past mistakes and not by successfully covering up errors.

## Concern 2

On February 11, 2004 the operating crew at Callaway Plant drove the plant into a Safety Injection, causing the six safety related injection pumps to start. The resulting injection into the core caused the Reactor Coolant System pressure to increase above the lift setpoint of the Power Operated Relief Valves (PORVs). The PORVs lifted and reseated about a dozen times over the next quarter hour, until the Safety Injection signal was reset and the injection pumps were secured.

Unbeknownst to the plant staff, the lifting of the PORVs damaged the two suction relief valves of the Residual Heat Removal (RHR) system. These valves are both replaced during even numbered refueling outages (frequency of R2 - every other refueling outage). Since the valves were last replaced during RF12 (November 2002) they were not removed and inspected in the Spring 2004 refueling outage (RF13). The broken valves remained in the system until RF14 (Fall 2005).

In the summer of 2006, the valves were tested and found to be broken. The subsequent root cause investigation determined that the valves were broken during the February 11, 2004 Safety Injection due to an inadequately designed piping arrangement on the Primary Relief Tank (PRT).

The inadequate piping design was first brought to the attention of Callaway Plant management in September of 2006. Despite urging from me, no effort was made to re-design the piping until December of 2006. Due to low staffing levels and other budgetary issues, adequate resources were not assigned during the winter months of early 2007 to re-design the PRT piping prior to the first opportunity to fix the problem during the Spring 2007 refueling outage (RF15). When I became aware the modification to the PRT piping was removed from RF15, I submitted Allegation RV-2007-A-0048 to the US NRC.

The US NRC has determined that AmerenUE appropriately deferred the PRT re-design

"based on the emergent design issues and deferment risk." As a result, Callaway Plant was allowed to resume power operations following RF15 with a Primary Relief Tank piping arrangement which could cause unpredictable damage to the RHR Suction Relief valves during a designed lifting of the Pressurizer PORVs.

I disagree with the assessment of the US NRC. The assessment of the US NRC is based on Callaway's claim that the design modification could not be ready in time for implementation during RF15. Although this was true, it was wholly due to the procrastination and short staffing of Callaway Plant.

A further issue is that Callaway Plant would prefer not to know about problems with its safety related equipment. During the investigation of the failure of the relief valves, it was suggested that the valves be replaced on a "staggered test basis" which would cause one to be replaced during odd numbered refueling outages and one to be replaced during even numbered refueling outages (currently both valves are replaced during even numbered refueling outages). The advantage of this is that equipment problems could potentially be detected 18 months (one fuel cycle) earlier.

Although the detection of equipment problems 18 months sooner is an advantage to the public, it is not necessarily an advantage to AmerenUE. If one valve is discovered broken, the other valve must be assumed to be broken - which could then necessitate a mid cycle outage to replace the valve. Callaway rejected the suggestion of replacing the valves on a "staggered test basis" because the Inservice Test Engineering group would prefer to not know about a failed valve when one potentially failed valve might still be in the system.

In performing its investigation of RIV-2007-A-0048 the US NRC gave a lot of credibility to the documentation of AmerenUE. Why an appropriately staffed and funded facility (which Callaway claims to be) cannot turn around a piping design modification in seven months was not addressed. The reasoning provided by the Inservice Test Engineering group for not performing future tests of the failed valves on a "staggered test basis" was also not challenged.

### Concern 3

Callaway Action Request 200809296 documented how an acid system at the cooling tower was improperly retired-in-place with residual acid still in the lines. Repeated documentation of problems related to acid corrosion included the following:

- 1) Repeated leaks from retired-in-place components
- 2) Equipment Operators refusing to perform tagging operations because of the condition of the system
- 3) An incident of highly acidic (pH 1) water leaching into the lower levels of a building during hard rains because of extensive acid pollution in the surrounding soil
- 4) Above ground piping completely corroded away
- 5) An unisolable leak from the bottom of an acid tank.



Callaway Action Request 200609328 documented a similar issue with regard to an improperly retired-in-place acid tank in the Rad Waste building. The acid tank was not properly neutralized until a leak developed which resulted in acid eating its way through floor conduits and dripping from the ceiling of the Rad Waste Control Room.

These issues were brought to the attention of one of the US NRC resident inspectors at Callaway. Since neither acid system performed a safety related function, the resident inspector believed he was unable to address the issue. The fact that the Corrective Action Process (the same process used for Safety Related and non-Safety Related issues) failed to address the issue was of no regulatory concern to him; my position is it should have been.

It should be noted that similar acid systems exist at Ameren fossil plants. If Ameren does not properly retire equipment at the Callaway Nuclear Plant (arguably the "jewel" in its regulated Missouri market), it is likely neglecting similar equipment at its de-regulated Illinois fossil plants.

(End of Concern 3)

Please call me at [REDACTED] if you have any questions regarding these matters.

Thank you,

[REDACTED]

Note: The blackened out identifying information of the concerned individual (allegor) appears in the original copy of this letter (and not as a result of FOIA processing).

September 12, 2007

MEMORANDUM TO: Jim Helier, Senior Allegations Coordinator  
Judith Walker, Allegations Coordinator

FROM: Vincent Gaddy, Chief, Reactor Projects Branch B

SUBJECT: REVIEW OF ALLEGATION MATERIAL RIV-2007-A-0048 and  
RIV-2007-A-0028

In response to your memorandum of September 5, 2007, requesting review of its attached material, the following responses to your questions are provided below.

- Since the letter disagrees with our previous response and has the potential to be a green ticket item, please address our review strategy (review by an individual independent of the issue, etc.) so that it can be discussed at a followup ARB.  
  
I assigned Rick Deese, a newly assigned Senior Project Engineer independent of the issue, to review the letter to figure out the differences in what was previously inspected and what the allegor is now asserting. His review is documented in Attachment 1.
- Determine if the individual has raised new concerns and if s/he has raised new concerns whether they are NRC regulated activities or not. Provide a brief statement of the concern. It is not necessary to include all of the background information. List each concern on a copy of the file "ARB Disposition Record."  
  
No new concerns were identified.
- List possible regulatory requirements (i.e. 10 CFR 26 etc.) that may apply to concern if known.  
  
No new regulatory issues were identified.
- Under significance, provide a followup priority (i.e. high - immediate action required, or normal - routine followup).  
  
Not applicable since no new issues were identified.
- Provide a recommendation for disposition (i.e. OI investigation, inspection, referral to licensee, or none). List this under "action."  
  
Provide additional information pertaining to the depth and breadth of our inspection on the previously asserted claims and also the role of the NRC and the bounds of our enforcement.
- List the branch you believe that should be responsible for the action.

DRP Projects Branch B.

- Provide a planned completion date, if known.

Will be determined following ARB discussions.

Should you have any questions, please call me.

#### ATTACHMENT 1

The allegor is not satisfied with the thoroughness or penalties imposed from previous inspections conducted by the NRC addressing his/her allegations. The allegor is concerned, in general, with the performance of the NRC in these inspections and states that we have not adequately pursued the issues. Specifically, the allegor breaks down his questions into three listed concerns. I have reviewed these "concerns" and their subparts and have summarized them, with my review, as follows:

1. Concern 1: The NRC has refused to investigate whether or not the leaving of control rods withdrawn during a plant event in 2003 was an intentional attempt to cover up a transient. The allegor states that the integrity of the individuals needs to be investigated by our Office of Investigations.

Reply: Reactor Projects Branch B inspected this concern and determined that the 90 minute time delay the allegor refers to was not prudent and did suggest that the operators may not have exercised optimum reactivity management and may not have had adequate plant awareness. The whole event was a plant transient and was not covered up since all plant info (e.g., graphs) was available for management review. Any attempt to cover it up (by not logging it or entering it into the CAP) may suggest some intent of impropriety, but ultimately when faced with the responsibilities of their licenses, the on-shift operators followed their plant operating procedures to safely shutdown the plant.

Four bases of the intent to cover up the transient were given by the allegor. The first two (failure of the crew to enter the incident in the station log and failure of the crew to enter the condition in the CAP) were cited in NRC Inspection Report 2007-03 as a licensee-identified violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." The violation was not identified as potentially willful. I suggest discussion be held at the ARB to re-address this decision. The agency has already decided that the violation occurred and that it was more than minor. A second discussion to determine if willfulness was involved seems prudent.

A previous CAR was issued for the event which only addressed the training needed to upgrade operator knowledge deficiencies. CAR resolution does not address all of the issues brought up by the CAR (especially the concerns raised by the allegor). In my opinion, we may already have a case for at least an example of a minor corrective action violation. Also, the licensee typically enters violations into their corrective action program for resolution. I suggest Reactor Projects Branch B follow the entry and closure of the CAP document for the violation to see if it addresses any potential willful aspects of the failures. Any reported willfulness from this review should then be presented to the ARB.

To further reinforce the questionable integrity of the individuals in question, the allegor

cites two other instances. One of these incidents describes an operator involved in an inadvertent safety injection and the other describes a significant plant transient while synchronizing to the grid. Neither of these descriptions contain information as to how the operators' integrity was questionable. After conducting an interview with the Callaway senior resident inspector and reviewing the alleged's letter, no information to support misconduct in these instances was evident that would further support the alleged's claims. The incidents appear to be caused by operator error and therefore do not implicate the integrity of the individuals involved.

I did note two possible issues which were indirectly brought up in the alleged's discussion. First, the alleged asserts that an individual received negative feedback for entering an issue into the CAP which, if substantiated could be a SCWE concern. Second, the alleged states that Callaway incorrectly determined the cause of an event to be equipment error, not human error, which could be an example of poor corrective actions by the CAP. These issues were not directly brought out as concerns by the individual, therefore, I do not recommend inspecting them unless the ARB believes it would support the agency position.

2. Concern 2.a: In response to an event which brought to Callaway's attention of a design deficiency with the RHR suction relief valve, Callaway claimed they could not design and implement in time a modification. The NRC "bought" this. The alleged questions why the NRC did not question how a modification would not be adequately scoped and done. Reply: Reactor Project Branch B inspected this concern and did question the licensee's timeline with respect to development and implementation of the modification. The inspectors concluded that the licensee did not properly develop the modification at first and therefore it was not available for implementation during the refueling outage. The inspectors did not intrusively question the cause of why the first development of the modification was faulty (like due to understaffing or economic reasons as the alleged states). Instead the inspectors focused on the licensee's actions after failure to implement the modification. From this inspection, the licensee was tasked to prove the viability of the RHR suction relief discharge line to NRC Region IV staff members in a conference call. This discussion yielded the conclusion that the line would not unduly increase the risk of the plant if the line were left unmodified. As a result, the inspectors concluded that the subsequent revision of the modification will be implemented in a manner timely with its safety significance and that no regulations (e.g. 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action,") were violated. My review concluded that the modification and its timeliness were adequately reviewed and I recommend no further inspection action.

Concern 2.b: Also, the NRC did not challenge why Callway engineering did not adopt the new policy of staggered train RHR suction relief valve testing.

Reply: Reactor Project Branch B did inspect this concern. Inspection determined that the Callaway Plant's actions to maintain their inspection times of both valves simultaneously met the requirements of the ASME Code. Any inspection plan is at discretion of licensee and any suggestion by NRC to change the inspection plan without any other known deficiencies would be beyond the role of the NRC as long as the licensee was meeting their code requirements. The assertion that Callaway personnel scheduled the tests to avoid negative consequences may have been a contributor in the decision, but the inspectors lacked any additional information which suggests negative safety impact. As a result, the NRC is not in the position to challenge why Callaway did



not adopt the staggered train policy. Therefore, my review recommends no further inspection. Action to communicate our NRC limits of enforcement to the allegor may alleviate his concern.

3. Concern 3.a: The cooling tower acid system was improperly abandoned-in-place in the past. As a result, a leak developed damaging floor conduits and the Rad Waste Control Room ceiling. The allegor was unsatisfied that we did not address this concern since the system did not perform a safety-related function. His main point of concern is that the Callaway Corrective Action Program failed in some manner and this was not addressed.

Reply: Reactor Project Branch B inspectors did not inspect this item. Upon receipt of the allegation, the inspector questioned the allegor as to the safety impact of the licensee failure. Since there was and still appears to be no safety significance to this assertion and the cooling tower acid system is not subject to NRC regulations, the inspectors concluded that entry of this issue into the allegation program was not required. Upon receipt of the concern, the inspector conferred with the Senior Allegations Coordinator who concurred with this decision. The inspector receiving the allegation also questioned the allegor whether this issue was an industrial safety concern warranting possible inspection of that sort; the allegor has never responded with any followup information.

#### SUMMARY

We need to communicate more information on what we have inspected and we also need to obtain more information from the allegor. The following actions are an assimilation of the ones detailed in the discussion above.

- Re-address our regional decision to pursue the willful aspects of the violation associated with the 2003 event.
- Continue tracking of resolution of the violation issued for the 2003 event.
- Thoroughly communicate with the allegor the inability of the NRC to enforce the regulations beyond what is written.
- Contact the allegor and seek any further information of the cooling tower acid leak allegation which would demonstrate its significance as an industrial safety concern (with the potential for forwarding to OSHA).

<b>ARB SUMMARY</b>		<b>Responsible Branch</b>	<b>RPBB</b>	<b>RIV-2007-A-0048</b>
Facility Name	Callaway	ARB Date:	April 17, 2007	
Docket Number	050-483	OI Case No.:		
<b>ARB DECISION</b>				
Purpose of ARB	Initial			
Previous Decisions	N/A			
Today's Decision	RPBB to inspect all 3 concerns.			
Basis for Another ARB				
<b>REFERRAL</b>				
Refer to:		Criteria Reviewed?		
Referral Rationale				
<b>OI INVESTIGATION</b>				
Priority Rationale				
DOL Deferral Rationale				
<b>ARB PARTICIPANTS</b> (* denotes ARB Chairman Approval)				
JWalker	HFreeman	KFuller	DWhite	AHowell*
DChamberlain	MVasquez	VGaddy	MBloodgood	

CONCERNS LIST				RIV-2007-A-0048
Concern (Brief Statement)				Regulatory Requirement
Branch	Action (Inspect, Refer, Investigate, No Action)	Planned Completion	Significance (High, Normal)	OI Priority (H, N, L)
1	The licensee decided, due to economic reasons, to not correct a long standing design deficiency on the RHR suction relief valves' discharge piping during the spring 2007 refueling outage but wait until the next refueling outage.			10 CFR 50 App. B Criterion XVI <i>Corrective Action</i>
RPBB	Inspect	5/17/07	Normal	L
2	The licensee changed the RHR suction relief valve surveillance from a staggered test basis to reduce the probability of identifying a failed valve while the valve is in the system. This again was an economic decision.			10 CFR 50 App. B Criterion XI <i>Test Control</i>
RPBB	Inspect	5/17/07	Normal	L
3	The licensee delayed testing RHR suction relief valve that had been previously removed. A mid-cycle outage would have been required to replace the other valve if the valve had failed its test.			10 CFR 50 App. B Criterion XI
RPBB	Inspect	5/17/07	Normal	L
4				
5				
6				

Revised 5/22/02

Indirect Charges

A10304 Support for Allegations (Reactors)

A10191 Support for Allegations (Materials)

Direct Inspection Activities

AF

Allegation Followup

BJ2

Allegation Prep/Doc

AFT

Allegation Travel



**ALLEGATION RECEIPT FORM**

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Received By:	Michael Peck	Receipt Date:	April 6, 2007
Receipt Method (meeting, phone call, letter, etc.)		Plant Mail - Letter	

**FACILITY**

Facility Name	Callaway Plant
Location	Fulton, Missouri
Docket(s)	50-483

**CONCERN**Summary the of Concerns (be brief)

- ◆ AmerenUE deferred corrective action for a potentially significant design deficiency from the current refueling outage until the next refueling outage. This design deficiency has been a long standing problem (please see attached letter).
- ◆ Delay in testing RHR relief valves (removed October 2005, not tested until August 2006).
- ◆ AmerenUE changed RHR relief valve surveillance from a staggered test bases to reduce the probability of identifying a failed valve.

Obtain concern specifics. What is the concern, when did it occur, who was involved, etc. If the concern involves discrimination, fill in the last section of the form.

The Callaway RHR suction relief and PORV discharge are routed through a common discharge line into the PRT. During operating cycle 14, the PORV lifted several times during a plant transient. The PRT pressurized, lifting a column of water up the common discharge line. This water collected on the backside of the RHR relief valve. A subsequent PORV lift caused a significant water hammer against the back side of the RHR relief valve, damaging the valve internals. The licensee's interim corrective action was to declare the RHR relief valves inoperable if the PORV should lift. AmerenUE had scheduled modification to correct the design problem this outage, but deferred the modification until the following refueling outage.

What is the potential safety impact? Is this an ongoing concern?

1. Unavailability of the RHR suction relief valves for cold pressure over protection (Technical Specification 3.4.12).
2. Potential loss of RHR pressure boundary - RWST drains to PRT (loss of both cold leg injection and cold leg recirculation modes of ECCS).

What requirement/regulation governs this concern?

50.50.a, ASME Code (relief valve discharge must have a drain path),  
50, App B, Criteria 16, prompt corrective actions

What records should the NRC review?

CARS 200703254, 200609805, 200607188, Mod MP 07-0007, LER 05000483/2006-008-00  
NRC Component Design Bases Inspection Report 05000483/2006009

What other individuals could the NRC contact for information?

n/a

How did the individual find out about the concern?



## ALLEGATION RECEIPT FORM

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Served on as Root Cause Team Member

Was the concern brought to management's attention? If so, what actions have been taken, if not, why not?

Why was the concern brought to the NRC's attention?

**ALLEGATION RECEIPT FORM**

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**ALLEGER INFORMATION**

Full Name	[Redacted]	Employer	AmerenUE
Mailing Address (Home)	[Redacted]	Occupation	Engineer
Telephone (Daytime) (Home) (Other)	[Redacted]	Relationship to facility	Employee
Preference for method and time of contact	n/a	Was the individual advised of identity protection	no
Referral	Explain that if the concerns are referred to the licensee, that alleged's identity will not be revealed and that the NRC will review and evaluate the thoroughness and adequacy of the licensee's response. If the concerns are an agreement state issue or the jurisdiction of another agency, explain that we will refer the concern to the appropriate agency, and if the alleged agrees, we will provide the alleged's identity for followup.		
Does the individual object to the referral?	n/a	Does the individual object to releasing their identity?	n/a
Regulations prohibit NRC licensees (including contractors and subcontractors) from discriminating against individuals who engage in protected activities (alleging violations of regulatory requirements, refusing to engage in practices made unlawful by statutes, etc.).			
Does the concern involve discrimination?	n/a	Was the individual advised of the DOL process?	No
<u>What was the protected activity?</u>			
Yes			
<u>What adverse actions have been taken? When?</u>			
n/a			
<u>Why does the individual believe the actions were taken as a result of engaging in a protected activity?</u>			

Revised 9/3/03

April 5, 2007

[REDACTED]  
[REDACTED]  
Michael Peck  
Nuclear Regulatory Commission  
Senior Resident Inspector  
Callaway Plant

Mr. Peck

The Primary Relief Tank Common Relief Valve Discharge Header at Callaway Plant is not properly designed: the arrangement of the piping permits the RHR Suction Relief Valves to be damaged by a water slug propelled down the pipe when a Pressurizer PORV is actuated at Normal Operating Pressure.

Callaway Plant management has known about this liability since September 22, 2006. The liability was formally documented in the Root Cause Report to CARS 200607188 in October 2006. I was the Operations representative to that Root Cause team. In October 2006 I personally informed the Manager of Design Engineering (then Fadi Diya) that the piping arrangement was inadequate and needed to be corrected at the next opportunity (Refueling Outage 15).

After questioning the Root Cause Team's findings for three months, Callaway Plant approved Modification Package MP 07-0007 on January 26, 2007. I learned late in the evening on April 3 that MP 07-0007 has been removed from RF15.

On April 3, 2007 I informed the Manager of Design Engineering (now Mark McLachlan) I was concerned our decision to not modify the PRT Common Relief Valve Discharge Header during RF15 might not be viewed favorably by the NRC. Mr. McLachlan's response was that it was not the NRC's decision as to whether or not we performed the modification. Callaway Plant had evaluated the Operability of the system with an Operability Determination and could decide to defer the modification based on a Probabilistic Risk Assessment. If the NRC disagreed with our decisions, they could challenge our decisions during their routine or special inspections. I was directed to CARS 200609805, Action 13 for the justification.

CARS 200609805, Action 13 states:

There were no instances where the set pressure of a relief was lowered, so loss of inventory from low pressure actuation is not considered credible.

I am not satisfied that a low pressure actuation is not considered credible. The events of February 11, 2004 caused the assembly pins of these valves to break into many pieces. With assembly pin fragments (FME) present as the bellows assembly is moving up and

*RV-2007-A-0048*

down due to the water hammer transient on the PRT Common Relief Discharge Header, I believe it is credible that an assembly pin fragment might lodge in such a manner that the full spring force is no longer applied to the center of the disk. With metal FME present along with bellows movement, many things are credible.

Yesterday (4/4/07), my concerns were documented in CARS 200703254, Inadequate PI&R Delays Modification to Safety Related System one cycle. CARS 200703254 was screened a Sig 4 (Corrective Action Only) meaning no investigation of the inadequacy of the CARS 200609805, Action 13 response nor any investigation of the inadequacy of our PI&R and modification processes is necessary.

Note that Callaway Plant has had many opportunities to discover and correct the design deficiencies of the PRT Common Relief Valve Discharge Header:

- In 1993, while pressurizing the RCS to start Reactor Coolant Pumps for the RF6 heatup, a RHR Suction Relief Valve lifted at 350 psig (more than 100 psi below its setpoint), causing RCS pressure to blowdown to approximately 100 psig. This valve was installed in the system during the February 13, 1988 Safety Injection and had not passed a surveillance lift since that time (every time it was tested it needed to be adjusted). When the valve was disassembled in 1994, the assembly pin was found broken in five pieces. An inadequate PI&R failed to determine the cause of the valve failure and closed the issue stating: "Based on past history and the design of the valve, this incident is considered an isolated case."
- Contrary to good engineering practice, the RHR Suction Relief valve surveillances are not performed on a staggered test basis. Performing these surveillances on a staggered test basis would have resulted in the removal and testing of one of the valves damaged in the 2004 Safety Injection an entire cycle earlier.
- The valves removed in October 2005 were not tested until August 2006. It is not understood why this 10 month delay was necessary.

Instead of suffering for having an inadequate PI&R process, Callaway Plant benefits from it. Had one of the damaged valves been removed in RF13 and failed its bench test during cycle 14, Callaway Plant may have been forced into a mid-cycle outage to replace the other valve. Had the valves removed in RF14 been bench tested earlier in the cycle, Callaway Plant may have been expected to make more of an effort to correct the design deficiencies of the PRT Common Relief Valve Discharge Header during RF15, incurring unbudgeted expenditures.

It appears Callaway Plant has made a sound business decision. Delaying exit from RF15 potentially costs Ameren \$1 million/day in lost generation. Due to our procrastination and inadequate decision making, MP 07-0007 could delay our exit from RF15 were we to attempt to perform it during this outage. We have once again decided that it is worth the regulatory risk to not do the right thing (correct known deficiencies with safety related equipment). This is a sound business decision because if the NRC were to challenge our response to CARS 200609805, Action 13, and if the NRC were to issue a finding and fine.

due to inadequate technical rigor in our response, it is extremely unlikely the amount of the fine the NRC could level would be any comparison to the loss generation the company could suffer by delaying its exit from RF15.

Another item of note is the response to CARS 200607188, Action 11.4. This action requested the surveillance frequency for testing the RHR Suction Relief Valves be performed on a staggered test basis. The response clearly indicates the reason the company does not wish to perform the surveillance on a staggered test basis is because we would be better off not knowing of a potential problem with the other train's valve until the valve is no longer in the system and current (vice past) operability is no longer an issue. Again, based on the limited regulatory fallout from having no operable RHR Suction Relief Valves and no operable (for COMS) PORVs for more than an entire fuel cycle, the refusal to perform these surveillances on a staggered test basis appears to be a sound business decision.

I have attempted to address the inadequacy of the PRT Common Relief Valve Discharge Header with my management through several methods: as a member of the Root Cause Team for CARS 200607188, by directly speaking with Mr. Diya in October 2006, by continued follow up with Mr. Sutherland (the design engineer for MP 07-0007) throughout the winter months, by directly speaking with Mr. McLachlan two days ago and finally with the origination of CARS 200703254. Callaway Plant management believes it is doing the right thing in delaying MP 07-0007 until RF16. I would like verification from the NRC that they agree with Callaway's actions. I recognize the NRC has 30 days to respond to me. If possible, I would like an answer before the plant is next in MODE 5 - ascending (currently scheduled for April 20, 2007).

Please contact me at [REDACTED] if you have any questions regarding this issue.

Thank you,  
[REDACTED]  
[REDACTED]



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4006

November 7, 2007

*duplicate for  
RIV-2007-A-0048*

Ms. Debra S. Katz  
Katz, Marshall & Banks, LLP  
1718 Connecticut Avenue, NW  
Sixth Floor  
Washington, DC 20009

SUBJECT: ALLEGATION NO. RIV-2007-A-0096

Dear Ms. Katz:

This letter is in reference to a letter your client addressed to the Honorable Richard J. Durbin, United States Senate, dated August 15, 2007. A copy of his letter was provided to Mr. David Dumbacher, the NRC Resident Inspector at the Callaway Plant, on August 30, 2007. In his letter, your client asserts that the Callaway Plant has a culture which discourages disagreement with upper management and which inhibits effective problem identification and resolution. Your client indicated that he was neither satisfied with the thoroughness of NRC investigations nor penalties imposed upon the licensee based upon the concerns (allegation files RIV-2007-A-0028 and RIV-2007-A-0048) that he provided to the NRC.

NRC Region IV management assigned a senior member of the technical staff, independent of the original resolution of the two allegations, to review your client's letter. On September 27, 2007, the Region IV Allegation Review Board concluded that we should reexamine certain aspects of the two allegations. We opened Allegation RIV-2007-A-0096 to track our review. The enclosure to this letter documents the issues raised by your client.

We will advise you when we have completed our review of this matter. Should you have any questions or comments during the interim regarding this matter, please call me Monday - Friday between 8:00 a.m. and 4:30 p.m. central time at 800-952-9677 extension 245. Should you want to respond in writing, our mailing address is listed in the header of this letter.

Sincerely,

  
Harry A. Freeman  
Senior Allegation Coordinator

Enclosure:  
Statement of Concerns

cc: To your client

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

## STATEMENT OF CONCERNS

RIV-2007-A-0096

Allegedly:

### **Concern 1**

From allegation file RIV-2007-A-0028, Concern 1: The NRC has refused to investigate whether or not the leaving of control rods withdrawn during a plant event in 2003 was an intentional attempt to cover up a transient. Your client states that the integrity of the individuals needs to be investigated by our Office of Investigations.

### **Concern 2**

From allegation file RIV-2007-A-0048, Concern 1: In response to an event which was brought to Callaway's attention of a design deficiency with the RHR suction relief valve, Callaway claimed they could not design and implement in time a modification. Your client questions why the NRC did not question how a modification would not be adequately scoped and done. Also, the NRC did not challenge why Callaway engineering did not adopt the new policy of staggered train RHR suction relief valve testing.

### **Concern 3**

Not previously addressed under the allegation process: The cooling tower acid system was improperly abandoned-in-place in the past. As a result, a leak developed damaging floor conduits and the Rad Waste Control Room ceiling. Your client was not satisfied that the NRC did not address this concern because the cooling tower acid system was a non-safety-related system. His main point-of-concern is that the Callaway Corrective Action Program failed in some manner and this was not addressed.

ENCLOSURE 1



D. Katz

bcc w/ Enclosure:  
Allegation File

via Certified Mail  
Mr. Lawrence Criscione  
1412 Dial Court  
Springfield, IL 65704

via Regular Mail  
Mr. Lawrence Criscione  
211 E. Dunklin Street  
Jefferson City, MO 65101

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or PO Box No.  
City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instruction

SUNSI Review Completed:   HAF   ADAMS: ☐ Yes ☒ No Initials:   HAF    
☐ Publicly Available ☒ Non-Publicly Available ☒ Sensitive ☐ Non-Sensitive

Non Responsive Record

OFFICE	RIV:SAC	RC/TL	C:RPBB	D:DRS	D:DRP	SAC
NAME	HAFreeman	KDFuller	VGGaddy	DChamberlain	ATHwell	HAFreeman
	/RA/	/RA/	/RA/	/RA/		
DATE	10/29/2007	11/02/2007	10/30/2007	10/31/2007	11/16/2007	11/10/2007

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T=Telephone

E=E-mail

F=Fax



bcc w/Resolution of Concern:  
Allegation File

**SENDER: COMPLETE THIS SECTION**

Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.

Print your name and address on the reverse so that we can return the card to you.

Attach this card to the back of the mailpiece, or on the front if space permits.

Article Addressed to:

**Mr. Lawrence Critchione**  
**1412 Dial Court**  
**Springfield, IL 62704**

**62704**

**7-A-0008**

**2. Article Number**  
(Transfer from service list)

**102565-02-M-1540**

**Domestic Return Receipt**

**1-1-0008**

**6/6**

**102565-02-M-1540**

**3. Service Type**

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☐ Registered Mail

☐ Insured Mail

☐ Express Mail

☐ C.O.D.

**4. Restricted Delivery? (Extra Fee)**

☐ Yes

☐ No

**5. Date of Delivery**

**JUN 12 2007**

**6. If delivery address different from item 3, Yes or No, other delivery address below:**

**(b)(7)(C)**

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City, State, ZIP+4

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SUNSI Review Completed: HAF ADAMS: ☐ Yes ☒ No Initials: HAF

☐ Publicly Available ☒ Non-Publicly Available ☒ Sensitive ☐ Non-Sensitive

DOCUMENT NAME: Non Responsive Record

Non Responsive Record

OFFICE	RIV:SAC	C:RPBB	SAC	
NAME	HAFreeman	VGGaddy	HAFreeman	
	<i>HAF</i>	<i>VGG</i>	<i>HAF</i>	
DATE	06/06/2007	06/06/2007	06/06/2007	

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005

April 24, 2007

Mr. Lawrence Criscione  
1412 Dial Court  
Springfield, IL 65704

SUBJECT: ALLEGATION NO. RIV-2007-A-0048

Dear Mr. Criscione:

This letter refers to your April 5, 2007, letter to Mr. Michael Peck, NRC Senior Resident Inspector, in which you expressed concerns related to the Callaway Nuclear Plant. You were concerned about the licensee's decisions, which may have been due to economics, to change implementation of modifications to the residual heat removal (RHR) system during the current refueling outage.

Enclosure 1 to this letter documents our understanding of your concerns. We will initiate actions to examine the facts and circumstances based on our understanding of your concerns. Therefore, if the summary of your concerns is not accurate, please contact me so that we can correct any misunderstanding before we complete our review.

An evaluation of your technical concerns should normally be completed within 6 months, although complex issues may take longer. In resolving your concerns, NRC intends to take all reasonable efforts not to disclose your identity. However, you are not considered a confidential source unless an explicit request of confidentiality has been formally granted in writing.

Thank you for notifying us of your concerns. We will advise you when we have completed our review of this matter. Should you have any questions or comments during the interim regarding this matter, please call me Monday - Friday between 8:00 a.m. and 4:30 p.m. central time at 800-952-9677 extension 245. Should you want to respond in writing, our mailing address is listed in the header of this letter.

Sincerely,

Harry A. Freeman  
Senior Allegation Coordinator

Enclosure:  
Statement of Concerns

cc via Regular US Mail:  
See next page

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

-2-

cc:

Mr. Lawrence Criscione  
211 E. Dunklin Street  
Jefferson City, MO 65101

## STATEMENT OF CONCERNS

RIV-2007-A-0048

Allegedly:

### **Concern 1**

---

The licensee decided, due to economic reasons, to not correct a long standing design deficiency on the RHR suction relief valves' discharge piping during the spring 2007 refueling outage but wait until the next refueling outage.

### **Concern 2**

---

The licensee changed the RHR suction relief valve surveillance from a staggered test basis to reduce the probability of identifying a failed valve while the valve is in the system. This again was an economic decision.

### **Concern 3**

---

The licensee delayed testing RHR suction relief valve that had been previously removed. A mid-cycle outage would have been required to replace the other valve if the valve had failed its test.

ENCLOSURE 1



bcc w/Statement of Concerns:  
Allegation File

**COMPLETE THIS SECTION ON DELIVERY**

**1. Article Addressed to:**  
Mr. Lawrence Corsione  
1412 Dial Court  
Springfield, IL 62704

**2. Article Number:**  
(b)(7)(C)  
7-A-0048

**3. Service Type:**  
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☐ Registered  
☐ Insured Mail  
☐ Express Mail  
☒ Return Receipt for Merchandise  
☐ C.O.D.

**4. Restricted Delivery? (Extra Fee)**  
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☒ No

**D. Is delivery address different from item 1? If YES, enter delivery address below:**  
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☒ No

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SUNSI Review Completed: HAF ADAMS: ☐ Yes ☒ No Initials: HAF  
☐ Publicly Available ☒ Non-Publicly Available ☒ Sensitive ☐ Non-Sensitive

DOCUMENT NAME: Non Responsive Record

Non Responsive Record

OFFICE	RIV:SAC	C:RPBB	SAC	
NAME	HAFreeman	VGGaddy	HAFreeman	
	<i>HAF</i>	<i>VG</i>	<i>HAF</i>	
DATE	04/23/2007	04/24/2007	04/24/2007	

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005

June 6, 2007

Mr. Lawrence Criscione  
1412 Dial Court  
Springfield, IL 65704

SUBJECT: ALLEGATION NO. RIV-2007-A-0048

Dear Mr. Criscione:

This refers to my April 24, 2007, letter which acknowledged receipt of your concerns regarding the Callaway Nuclear Plant. Additionally, I advised you that the NRC would initiate actions to review your concerns related to modifications planned for the residual heat removal system.

In your letter dated April 30, 2007, you acknowledged that Concern 1 was accurate as written but indicated that you did not intend for Concerns 2 & 3 to be separate allegations (concerns) but were included to either demonstrate the licensee's motive for not improving their Problem Identification and Resolution process or to emphasize the reason the licensee did not consider RF15 as the first available opportunity. Based upon your letter, the NRC staff did not inspect either Concerns 2 or 3 or reach a conclusions regarding if either of these concerns were substantiated.

The NRC has completed its inspection of Concern 1. The enclosed "Resolution of Concern" documents your concern and summarizes the NRC resolution. In summary, the NRC staff was not able to substantiate your concern.

Thank you for informing us of your concern. We believe that our actions in this matter have been responsive to your concerns. We take our safety responsibilities to the public very seriously and will continue to do so within the bounds of our lawful authority. Unless the NRC receives additional information that suggests that our conclusion should be altered, we plan no further action and we consider this case closed.

Should you have any additional questions regarding our resolution, please contact Mr. Vincent G. Gaddy, Chief, Reactor Projects Branch B, at 800-952-9677, Extension 141, or you can call me at 800-952-9677, Extension 245, Monday - Friday between 8:00 a.m. and 4:30 p.m. Central time.

Sincerely,

Harry A. Freeman  
Senior Allegation Coordinator

Enclosure:  
Resolution of Concern

cc via Regular US Mail:  
See next page

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

cc:  
Mr. Lawrence Criscione  
211 E. Dunklin Street  
Jefferson City, MO 65101

## RESOLUTION OF CONCERN

RIV-2007-A-0048

The NRC performed an onsite inspection of Callaway Plant residual heat removal (RHR) relief valve concerns between April 23 and May 11, 2007. The inspection included a review of:

- Preventive maintenance work packages P706579, P706580, P679997, and P679998
- ASME OM Section XI 2001, Appendix 1
- Callaway Plant On-Site Review Committee Notes Number 2207, March 28, 2007
- Callaway Action Requests CAR (b)(7)(C) and CAR (b)(7)(C)
- Modification Package MP 07-0007
- Regulatory Issue Summary 2005-20, NRC Inspection Manual, Part 9900: Technical Guidance, "Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety," September 26, 2005

The inspectors discussed the issue with cognizant Plant Engineering and Risk Assessment personnel. In addition, a NRC Senior Reactor Analyst independently reviewed the assumptions and methodology used in the AmerenUE risk assessment associated with deferment of the modification to Refueling Outage 16.

### Concern 1

The licensee decided, due to economic reasons, to not correct a long standing design deficiency on the RHR suction relief valves' discharge piping during the Spring 2007 refueling outage but wait until the next refueling outage.

### Resolution 1

The inspectors substantiated that AmerenUE deferred action to correct the RHR suction relief valve discharge piping deficiency until Refueling Outage 16. Callaway Action Request

(b)(7)(C)

documented that modification deferment was based on emergent issues associated with the proposed design changes. The Callaway Plant On-Site Review Committee approved the deferment on March 28, 2007. AmerenUE calculated a delta core damage frequency of less than  $1 \times 10^{-6}$  if the modification was deferred until Refueling Outage 16. Based on the emergent design issues and deferment risk, the inspectors concluded that AmerenUE appropriately applied the guidance in NRC Regulatory Issue Summary 2005-20 for deferment of corrective actions to correct the RHR suction relief deficiency.

The inspectors did not substantiate that AmerenUE deferred the modification due to economic reasons.

ENCLOSURE



**CLOSURE LETTER & ALLEGATION FILE CHECKLISTS****A. Closure Letter Checklist**

- ☒ Verify that Statement of Concerns in the acknowledgment letter compares with Resolution of Concerns and concerns listed in CL and that all concerns have been addressed. *Modified based upon allegor's letter.*
- ☒ Verify that responsible branch has concurred on closure letter to allegor.
- ☐ *NA* Verify that D:ACES (or designee) has concurred on closure correspondence to the allegor and the licensee for unsubstantiated discrimination and wrongdoing allegations.
- ☐ *NA* Verify that responsible branch has concurred on closure letter to licensee for unsubstantiated discrimination and wrongdoing allegations.

*Has*  
Completed by

*6/7/07*  
Date

**B. Allegation File Closure Checklist**

- ☒ Verify that all assigned actions have been completed by the responsible branches and/or divisions.
- ☒ Verify that dates of assigned and completed actions match the dates of the related documentation maintained in the file.
- ☒ Compare the concerns stated in the receipt documentation to the Statement of Concerns in the acknowledgment letter and the Resolution of Concerns in the closure letter and CL. If discrepancies are identified, such as a concern that was not addressed, the responsible branch chief should be notified. If warranted, the allegor should be contacted and a supplemental closure letter should be issued to the allegor.
- ☒ Verify that the file contains copies of the referenced memoranda, inspection reports, ARB summaries, OI reports, OI transcripts, DOL documentation, acknowledgment and closure letters to the allegor, referral letters to the licensee or Agreement State, and AMS summary page.
- ☐ *NA* If the allegation was referred to the licensee and no further action will be taken, contact the licensee to advise that the allegation is closed.
- ☒ Verify accuracy of all AMS data entries and that a "file closed" entry was made in AMS.
- ☒ e-mail responsible branch that file is closed.

*Has*  
Completed by

*6/7/07*  
Date

**From:** Vincent Gaddy  
**To:** R4ALLEGE  
**Date:** Mon, Jun 4, 2007 7:21 AM  
**Subject:** Closeout Memo RIV-2007-a-0048

see attached

June 4, 2007

MEMORANDUM TO: Harry Freeman, Senior Allegations Coordinator

FROM : Vincent Gaddy, Chief, Projects Branch B, Division Reactor  
Projects, Region IV

SUBJECT: ALLEGATION RIV- 2007-A-0048 CLOSURE MEMO

This memorandum provides information to address the alleged's concerns regarding the subject allegation. The NRC has completed its follow-up and inspection of the concerns. The enclosed "Resolution of Concerns" documents each of the concerns and summarizes the NRC resolution. In summary, one of the three concerns (Concern 1) provided on the Concerns List was partially substantiated. An unsubstantiated concern does not mean that the information that was provided was untrue, it only means that we did not find sufficient information during our inspection to support the concerns.

Region IV received clarification, by an April 30, 2007 letter, that the alleged did not intend for Concerns 2 and 3 be included as separate allegations. The alleged stated that the information captured as Concerns 2 and 3 were provided as supplemental information only. Based on this clarification, Branch B did not inspect either Concerns 2 or 3 or reach a conclusions regarding if either of these concerns were substantiated.

Unless the NRC receives additional information that suggests that these conclusions should be altered, Branch B plans no further action and considers this case closed.

The NRC performed an onsite inspection of Callaway Plant residual heat removal (RHR) relief valve concerns between April 23 and May 11, 2007. The inspection included a review of:

- Preventive maintenance work packages P706579, P706580, P679997, and P679998
- ASME OM Section XI 2001, Appendix 1
- Callaway Plant On-Site Review Committee Notes Number 2207, March 28, 2007
- Callaway Action Requests CAR (b)(7)(C) and CAR (b)(7)(C)
- Modification Package MP 07-0007
- Regulatory Issue Summary 2005-20, NRC Inspection Manual, Part 9900: Technical Guidance, "Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety," September 26, 2005

The inspectors discussed the issue with cognizant Plant Engineering and Risk Assessment personnel. In addition, a NRC Senior Reactor Analyst independently reviewed the assumptions and methodology used in the AmerenUE risk assessment associated with deferment of the modification to Refueling Outage 16.

**Concern 1:**

The licensee decided, due to economic reasons, to not correct a long standing design deficiency on the RHR suction relief valves' discharge piping during the Spring 2007 refueling outage but wait until the next refueling outage.

**Resolution 1:**

The inspectors substantiated that AmerenUE deferred action to correct the RHR suction relief valve discharge piping deficiency until Refueling Outage 16. Callaway Action Request

(b)(7)(C) documented that modification deferment was based on emergent issues associated with the proposed design changes. The Callaway Plant On-Site Review Committee approved the deferment on March 28, 2007. AmerenUE calculated a delta core damage frequency of less than  $1 \times 10^{-6}$  if the modification was deferred until Refueling Outage 16. Based on the emergent design issues and deferment risk, the inspectors concluded that AmerenUE appropriately applied the guidance in NRC Regulatory Issue Summary 2005-20 for deferment of corrective actions to correct the RHR suction relief deficiency.

The inspectors did not substantiate that AmerenUE deferred the modification due to economic reasons.



**From:** Vincent Gaddy  
**To:** R4ALLEGE  
**Date:** Thu, May 24, 2007 8:56 AM  
**Subject:** Allegation RIV-A-0048 Closure Memo

Harry/ Judith

see attached.

Vince

**CC:** Dumbacher, David; Peck, Michael S.

May 24, 2007

MEMORANDUM TO: Harry Freeman, Senior Allegations Coordinator

FROM : Vincent Gaddy, Chief, Projects Branch B, Division Reactor  
Projects, Region IV

SUBJECT: ALLEGATION RIV- 2007-A-0048 CLOSURE MEMO

This memorandum provides information to address the alleged's concerns regarding the subject allegation. The NRC has completed its follow-up and inspection of the concerns. The enclosed "Resolution of Concerns" documents each of the concerns and summarizes the NRC resolution. In summary, one of the three concerns (Concern 1) was partially substantiated. An unsubstantiated concern does not mean that the information that was provided was untrue, it only means that we did not find sufficient information during our inspection to support the concerns.

Subsequent to the inspection followup of the these issues by the inspectors, the alleged responded in a letter dated April 30, 2007, clarifying the three concerns he received in our Statement of Concerns dated April 24, 2007. In the Statement of Concerns, the NRC documented what we believed were the alleged concerns. The alleged stated that Concern 1 was accurate as written. The alleged stated that Concerns 2 and 3 were not accurate and they were never intended to be interpreted by the NRC as being separate allegations. The alleged stated that Concern 2 was merely included as a point to demonstrate Callaway Plant's motive for not improving their Problem identification and Resolution process. Concern 3 was merely included to emphasize that the reason Callaway Plant does not consider Refuel 15 as the first opportunity to correct its pressurizer relief tank design deficiencies was primarily due to the decision to delay testing the relief valves for 10 months. Although the alleged stated that these two concerns were not intended as separate allegation, they were followed up and addressed as separate allegations.

Unless the NRC receives additional information that suggests that these conclusions should be altered, Branch B plans no further action and considers this case closed.

The NRC performed an onsite inspection of Callaway Plant residual heat removal (RHR) relief valve concerns between April 23 and May 11, 2007. The inspection included a review of:

- Preventive maintenance work packages P706579, P706580, P679997, and P679998
- ASME OM Section XI 2001, Appendix 1
- Callaway Plant On-Site Review Committee Notes Number 2207, March 28, 2007
- Callaway Action Requests CAR (b)(7)(C) and CAR (b)(7)(C)
- Modification Package MP 07-0007
- Regulatory Issue Summary 2005-20, NRC Inspection Manual, Part 9900: Technical Guidance, "Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety," September 26, 2005

The inspectors discussed the issue with cognizant Plant Engineering and Risk Assessment personnel. In addition, a NRC Senior Reactor Analyst independently reviewed the assumptions and methodology used in the AmerenUE risk assessment associated with deferment of the modification to Refueling Outage 16. The NRC also conducted several phone calls with licensee senior management to discuss this issue.

**Concern 1:**

The licensee decided, due to economic reasons, to not correct a long standing design deficiency on the RHR suction relief valves' discharge piping during the Spring 2007 refueling outage but wait until the next refueling outage.

**Resolution 1:**

The inspectors substantiated that AmerenUE deferred action to correct the RHR suction relief valve discharge piping deficiency until Refueling Outage 16. Callaway Action Request

(b)(7)(C) documented that modification deferment was based on emergent issues associated with the proposed design changes. The Callaway Plant On-Site Review Committee approved the deferment on March 28, 2007. AmerenUE calculated a delta core damage frequency of less than  $1 \times 10^{-6}$  if the modification was deferred until Refueling Outage 16. Based on the emergent design issues and deferment risk, the inspectors concluded that AmerenUE appropriately applied the guidance in NRC Regulatory Issue Summary 2005-20 for deferment of corrective actions to correct the RHR suction relief deficiency.

The inspectors did not substantiate that AmerenUE deferred the modification due to economic reasons.

**Concern 2:**

The licensee changed the RHR suction relief valve surveillance from a staggered test basis to reduce the probability of identifying a failed valve while the valve is in the system. This again was an economic decision.

**Resolution 2:**

The inspectors did not substantiate that AmerenUE changed the suction relief valve surveillance from a staggered test basis. ASME OM Section XI required that the relief valves be tested every three years. Plant preventive maintenance records indicated that both RHR suction relief valves were removed and testing following Refuel 12 (2002) and again following Refuel 14 (2005). The inspectors did not identify that the relief valves had been tested on a staggered test basis.

**Concern 3:**

The licensee delayed testing RHR suction relief valves that had been previously removed. A mid-cycle outage would have been required to replace the other valve if the valve had failed its test.

**Resolution 3:**

The inspectors did not substantiate that AmerenUE delayed testing the suction relief valves. The relief valves were removed during the Fall 2005 refueling outage and testing in August 2006 (P706579 and P706580). This time interval was within the one year specified by ASME OM Section XI 2001, Appendix 1.



April 30, 2007

1412 Dial Court  
Springfield, IL 62704

Mr. Harry A. Freeman  
Senior Allegation Coordinator  
United States Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011-4005



SUBJECT: Allegation No. RIV-2007-A-0048

Dear Mr. Freeman:

With regard to the Statement of Concerns from your letter dated April 24:

- 1) Concern 1 is accurate as written and is an appropriate summary of the allegation.
- 2) Concern 2 is not accurate. The Surveillance for removing and testing the RHR Suction Relief Valves has an R2 frequency - required every other Refuel Outage. These surveillances are currently performed during even numbered outages for both trains. The Root Cause Team for CARS 200607188 suggested these surveillances be performed on a "staggered test basis" such that one train would be performed during even numbered Refuel Outages and the other train during odd numbered Refuel Outages. **These surveillances have never been performed on a staggered test basis.** Although there may be valid reasons for rejecting the suggestion to perform the surveillance testing on a staggered test basis, the reason given in Action 11.4 to CARS 200607188 indicates the company does not wish to perform the surveillances on a staggered test basis because it would prefer not to know of a potential problem with the other train's valve until that valve is out of the system.

The argument of the Root Cause Team was that had one train's surveillance (say the 'A' Train) been performed during RF13, then the company would have performed the investigation of CARS 200607188 eighteen months earlier. Here is how that process would have hypothetically worked:

The 'A' train valve removed in RF13 would not have been tested until early cycle 14. Once the valve failed its surveillance test, the operability of the valve still installed in the system (the 'B' train valve) would have been called into question. Callaway Plant would have then been faced with a mid-cycle MODE 5 outage to replace the inoperable valve. Although this scenario would have been better from a "nuclear safety" stand point (i.e. Instead of **both** RHR suction relief valves being unknowingly inoperable for all of cycle 14, only one inoperable relief valve would have been installed and this would have been discovered and corrected mid-cycle), it would have been financially inconvenient for Ameren (i.e. an unplanned, mid-cycle MODE 5 outage would have cost the company generating revenue).

I appreciate the concern of the company for the need to avoid forced shutdowns. My position is if we (Callaway Plant) are concerned that the above scenario could occur, then we should avoid it by changing the frequency of the surveillances to R1 - not by refusing to perform them on a "staggered test basis". However, if we believe the valves are reliable enough that the R2 frequency is justified (which I believe it is) then we should be willing to take the risk (which should be minimal) that a valve will fail its surveillance testing and require a forced outage to replace the other train's valve.

Concern 2 was never intended to be a separate allegation. It was merely included as a data

point to demonstrate Callaway Plant's motive for not improving their Problem Identification and Resolution process.

3) Concern 3 is not accurately stated. The second sentence (A mid-cycle outage would have been required to replace the other valve if the valve had failed its test) belongs with Concern 2. The first sentence requires clarification. The licensee did not *intentionally* delay testing the RHR suction relief valves. Both valves were removed in October 2005, shipped to NWS Technologies, and tested in August 2006. Although I do not understand the reason for the 10 month delay, I do not believe it was intentional. It is my suspicion that we probably received a cheaper contract with NWS Technologies by giving them a 12 month time frame to test the valves.

Part of Callaway Plant's reasoning for RF15 not being the first opportunity to correct the design inadequacies of the PRT Common Relief Valve Discharge Header is that there was not enough time to prepare a modification package between the time the issue was discovered (Sept. 2006) and the time of the start of RF15. My position is that had there not been a ten month delay between removing the valves and testing the valves, then the plant could have potentially had 15 months (vice 6 months) to design the modification for correcting the piping deficiencies.

It is my understanding that the 10 month delay did not violate the IST program. Although code requirements might generously provide a one year time frame in which to accomplish testing, good engineering judgement would dictate that required testing of removed components not be unnecessarily delayed. If Callaway Plant delays testing toward the end of the required time frame, then we should assume the risk associated with this delay. The associated risk is that the component may fail testing and corrective actions may be required. Since the corrective action is MP 07-0007, the risk that Callaway assumed in delaying testing is that the Modification Package had to be planned in 6 months vice 15 months - potentially extending RF15.

Concern 3 was never intended to be a separate allegation. It was merely included to emphasize that the reason Callaway Plant does not consider RF15 as the first opportunity to correct its PRT design deficiencies was primarily due to our decision to delay testing the relief valves at NWS Technologies for 10 months.

Please contact me at (573) 230-3959 if you have any questions or need additional information.


Thank you,

  
Lawrence Criscione



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005

May 1, 2007

MEMORANDUM TO: Vincent G. Gaddy, Chief, Reactor Projects Branch B  
FROM:  Harry A. Freeman, Senior Allegation Coordinator  
SUBJECT: REVIEW OF ALLEGATION MATERIAL RIV-2007-A-0048

ACES has received the attached response to the acknowledgment letter for the Callaway RHR Suction Relief Valve issue. Please compare and revise the Statement of Concerns.

An electronic copy of the Concerns List should be sent to R4ALLEGATION. Should you have any questions, please call me. Please document your time as follows:

Indirect Charges

A10304 Support for Allegations (Reactors)  
A10191 Support for Allegations (Materials)

Direct Inspection Activities

AF Allegation Followup  
BJ2 Allegation Prep/Doc  
AFT Allegation Travel

Attachments: As Stated

cc w/attachment: Allegation File

**From:** Frank Brush  
**To:** R4ALLEGE  
**Date:** Mon, Apr 9, 2007 8:07 AM  
**Subject:** A-0048 Concerns List

The subject document should be attached.

Frank



CONCERNS LIST				RIV-2007-A-0048
Concern (Brief Statement)				Regulatory Requirement
Branch	Action (Inspect, Refer, Investigate, No Action)	Planned Completion	Significance (High, Normal)	OI Priority (H, N, L)
1	The licensee decided, due to economic reasons, to not correct a long standing design deficiency on the RHR suction relief valves' discharge piping during the spring 2007 refueling outage but wait until the next refueling outage.			10 CFR 50 App. B Criterion XVI
RPBB	Inspect		High	L
2	The licensee changed the RHR suction relief valve surveillance from a staggered test basis to reduce the probability of identifying a failed valve while the valve is in the system. This again was an economic decision.			10 CFR 50 App. B Criterion XI
RPBB	Inspect		High	L
3	The licensee delayed testing RHR suction relief valve that had been previously removed. A mid-cycle outage would have been required to replace the other valve if the valve had failed its test.			10 CFR 50 App. B Criterion XI
RPBB	Inspect		High	L
4				
5				
6				

Revised 5/22/02

Indirect Charges

A10304 Support for Allegations (Reactors)

A10191 Support for Allegations (Materials)

Direct Inspection Activities

AF Allegation Followup

BJ2 Allegation Prep/Doc

AFT Allegation Travel



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
811 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005

April 6, 2007

MEMORANDUM TO: Vincent G. Gaddy, Chief, Reactor Projects Branch B  
FROM: *JW* Judith Walker, Allegation Coordinator  
SUBJECT: REVIEW OF ALLEGATION MATERIAL RIV-2007-A-0048

ACES has received the attached material related to Callaway. **This allegation is scheduled to be discussed at the April 23, 2007, ARB. Please review the material by April 17, 2007, for the following:**

- Determine what each of the individual's concerns are, whether they are NRC regulated activities or not. Provide a brief statement of the concern. It is not necessary to include all of the background information.
- List each concern on a copy of the file "Allegation Concerns List.wpd" located at r:\aces\allegations\ROPG 0858 Allegation Related Forms\Allegation Concerns List.wpd
- List possible regulatory requirements (i.e. 10 CFR 26 etc.) that may apply to concern if known.
- Under significance, provide a followup priority (i.e. high - immediate action required, or normal - routine followup).
- Provide a recommendation for disposition (i.e. OI investigation, inspection, referral to licensee, or none). List this under "action."
- List the branch you believe that should be responsible for the action.
- Provide a planned completion date, if known.

An electronic copy of the Concerns List should be sent to R4ALLEGE. This form must be received by 1:00 p.m. on Wednesday for inclusion in the following Monday's ARB. Should you have any questions, please call me. Please document your time as follows:

Indirect Charges

A10304 Support for Allegations (Reactors)  
A10191 Support for Allegations (Materials)

Direct Inspection Activities

AF Allegation Followup  
BJ2 Allegation Prep/Doc  
AFT Allegation Travel

Attachments: As Stated  
cc w/attachment: Allegation File

**ALLEGATION RECEIPT FORM**

Page 1

Received By:	Michael Peck	Receipt Date:	April 6, 2007
Receipt Method (meeting, phone call, letter, etc.)		Plant Mail - Letter	

**FACILITY**

Facility Name	Callaway Plant
Location	Fulton, Missouri
Docket(s)	50-483

**CONCERN**Summary the of Concerns (be brief)

1. AmerenUE deferred corrective action for a potentially significant design deficiency from the current refueling outage until the next refueling outage. This design deficiency has been a long standing problem (please see attached letter).
2. Delay in testing RHR relief valves (removed October 2005, not tested until August 2006).
3. AmerenUE changed RHR relief valve surveillance from a staggered test bases to reduce the probability of identifying a failed valve.

Obtain concern specifics. What is the concern, when did it occur, who was involved, etc. If the concern involves discrimination, fill in the last section of the form.

The Callaway RHR suction relief and PORV discharge are routed through a common discharge line into the PRT. During operating cycle 14, the PORV lifted several times during a plant transient. The PRT pressurized, lifting a column of water up the common discharge line. This water collected on the backside of the RHR relief valve. A subsequent PORV lift caused a significant water hammer against the back side of the RHR relief valve, damaging the valve internals. The licensee's interim corrective action was to declare the RHR relief valves inoperable if the PORV should lift. AmerenUE had scheduled modification to correct the design problem this outage, but deferred the modification until the following refueling outage.

What is the potential safety impact? Is this an ongoing concern?

1. Unavailability of the RHR suction relief valves for cold pressure over protection (Technical Specification 3.4.12).
2. Potential loss of RHR pressure boundary - RWST drains to PRT (loss of both cold leg injection and cold leg recirculation modes of ECCS).

What requirement/regulation governs this concern?

50.50.a, ASME Code (relief valve discharge must have a drain path),  
50, App B, Criteria 16, prompt corrective actions

What records should the NRC review?

CARS (b)(7)(C) 200609805, 200607188, Mod MP 07-0007, LER 05000483/2006-008-00  
NRC Component Design Bases Inspection Report 05000483/2006009

## ALLEGATION RECEIPT FORM

Page 2

What other individuals could the NRC contact for information?

n/a

How did the individual find out about the concern?

Served on as Root Cause Team Member

Was the concern brought to management's attention? If so, what actions have been taken, if not, why not?

Why was the concern brought to the NRC's attention?



**ALLEGATION RECEIPT FORM**

Page 3

**ALLEGER INFORMATION**

Full Name	Lawrence Criscione	Employer	AmerenUE
Mailing Address (Home)	211 E. Dunklin Street Jefferson City, MO 65101	Occupation	Engineer
Telephone (Daytime) (Home) (Other)	573-230-3959	Relationship to facility	Employee
Preference for method and time of contact	n/a	Was the individual advised of identity protection	no
Referral	Explain that if the concerns are referred to the licensee, that alleged's identity will not be revealed and that the NRC will review and evaluate the thoroughness and adequacy of the licensee's response. If the concerns are an agreement state issue or the jurisdiction of another agency, explain that we will refer the concern to the appropriate agency, and if the alleged agrees, we will provide the alleged's identity for followup.		
Does the individual object to the referral?	n/a	Does the individual object to releasing their identity?	n/a
Regulations prohibit NRC licensees (including contractors and subcontractors) from discriminating against individuals who engage in protected activities (alleging violations of regulatory requirements, refusing to engage in practices made unlawful by statutes, etc.).			
Does the concern involve discrimination?	n/a	Was the individual advised of the DOL process?	No
<u>What was the protected activity?</u>  Yes			
<u>What adverse actions have been taken? When?</u>  n/a			
<u>Why does the individual believe the actions were taken as a result of engaging in a protected activity?</u>			

Revised 9/3/03



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
811 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005

Given to  
Vince on 9/5/07

September 5, 2007

MEMORANDUM TO: Vincent Gaddy, Chief, Reactor Branch B

FROM: Harry A. Freeman, Senior Allegation Coordinator *Jim Helmer*

SUBJECT: REVIEW OF ALLEGATION MATERIAL RIV-2007-A-0048 and  
RIV-2007-A-0028 *(RIV-2007-A-0096) maybe*

The Concerned Individual provided the attached to the NRC on August 30, 2007. Please review the material by September 12, 2007:

- Since the letter disagrees with our previous response and has the potential to be a green ticket item, please address our review strategy (review by an individual independent of the issue, ect.) so that it can be discussed at a followup ARB
- Determine if the individual has raised new concerns and if s/he has raised new concerns whether they are NRC regulated activities or not. Provide a brief statement of the concern. It is not necessary to include all of the background information. List each concern on a copy of the file "ARB Disposition Record" located at (b)(7)(F)
- List possible regulatory requirements (i.e. 10 CFR 26 etc.) that may apply to concern if known.
- Under significance, provide a followup priority (i.e. high - immediate action required, or normal - routine followup).
- Provide a recommendation for disposition (i.e. OI investigation, inspection, referral to licensee, or none). List this under "action."
- List the branch you believe that should be responsible for the action.
- Provide a planned completion date, if known.

An electronic copy of the ARB Disposition Record should be sent to R4ALLEGATION. This form must be received by 1:00 p.m. on Wednesday for inclusion in the following Monday's ARB. Should you have any questions, please call me. Please document your time as follows:

Indirect Charges

A10304 Support for Allegations (Reactors)  
A10191 Support for Allegations (Materials)

Direct Inspection Activities

AF Allegation Followup  
BJ2 Allegation Prep/Doc  
AFT Allegation Travel

Attachments: As Stated

cc w/attachment: Allegation Files RIV-2007-A-0048 and RIV-2007-A-0028