AmerenUE
Callaway Plant

PO Box 620
Fulton, MO 65251

December 14, 2005

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

ULNRC05240

Ameren UE

Ladies and Gentlemen:

REPLY TO
INSPECTION REPORT NO. 50-483/2005-004
UNION ELECTRIC CO.

This responds to Mr. William B. Jones letter dated November 5, 2005, which transmitted Inspection Report 50-483/2005-004. Following discussions with Mr. Jones the week of December 1, an extension was requested to provide clarification to the analysis of one finding and one apparent violation. These clarifications do not contest the violations or their significance. Our response to the report is presented in the attachment.

None of the material in the response is considered proprietary by Union Electric.

This letter does not contain new commitments.

If you have any questions regarding this response, or if additional information is required, please let me know.

Sincerely,

Keith D. Young
Manager, Regulatory Affairs

KDY/MAR/slk
Attachment 1: Response

IE01

Mr. Bruce S. Mallett
Regional Administrator
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-4005

Senior Resident Inspector
Callaway Resident Office
U.S. Nuclear Regulatory Commission
8201 NRC Road
Steedman, MO 65077

Mr. Jack N. Donohew (2 copies)
Licensing Project Manager, Callaway Plant
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop 7E1
Washington, DC 20555-2738

Missouri Public Service Commission
Governor Office Building
200 Madison Street
PO Box 360
Jefferson City, MO 65102-0360

Following are comments related to the 2005 third quarter integrated inspection of Callaway Plant – Report 50-483/2005-004.

Statement of Finding:
50-483/2005004-02 NCV,
Misalignment of the TDAFP due to Personnel Error (Section 1R15):

Green. A self-revealing noncited violation of Technical Specification 5.4.1.a, "Procedures," was identified after AmerenUE failed to properly align the turbine driven auxiliary feedwater pump mechanical overspeed trip mechanism after surveillance testing. The trip mechanism was misaligned from August 1 - 18, 2005. The misaligned trip mechanism increased the probability the turbine would trip if the pump would have been required to respond to an event. This issue was entered into the corrective action program as Callaway Action Request 200505801. This finding, which involved the failure of an operator to follow procedure, was associated with the crosscutting area of human performance.

This finding is greater than minor because the degraded trip mechanism affected the reactor mitigating systems cornerstone and the equipment performance attribute to ensure availability of systems that respond to prevent core damage. This finding is only of very low safety significance because the condition was not a design or qualification deficiency confirmed to result in loss of function per Generic Letter 91-18; did not result in an actual loss of safety function of a system; did not increase the likelihood of a fire; and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event (Section 1R15).

Response to Finding:

1. NRC Manual Chapter 0612, dated 1/14/2004, defines *"licensee-identified" findings as "those findings identified through a licensee program or process that are specifically intended to identify the problem." "Self Revealing" findings are defined as "those findings that reveal themselves to either the NRC or licensee through a change in process, capability or functionality of equipment, or programs through routine operation"*

   This finding is better characterized as "licensee identified" vice "self-revealing". The responsibilities of the System Engineer include monitoring the system's condition to ensure its operational readiness. The condition of the trip mechanism was identified by the System Engineer while performing a walkdown of the Turbine Driven Auxiliary Feedwater Pump (TDAFP). The discovery method is consistent with the definition of a "licensee-identified" finding. It was not detected as a result of an operational event such as a spurious trip of the pump or plant alarm. The action on the part of the system

engineer required critical thinking skills to discern the condition given the ambiguity of the procedural guidance.

2. The description of the event contained in report section 1R15b.1., states in part *"The trip linkage misalignment resulted in increased probability of an inadvertent TDAFP trip during accident conditions."*

   Following inspection and testing performed on the TDAFP after the linkage misalignment was identified, no limiting upset conditions were identified that would cause the linkage to change state unexpectedly. For the period the trip linkage was misaligned, the TDAFP remained capable of performing its safety function. No increase in the probability of an inadvertent TDAFP trip during accident conditions was identified.

Statement of Finding:
50-483/2005004-01 AV,
Failure to Maintain Cold Overpressure Mitigation Measures as Required by TSs (Section 1R14):

TBD. A self-revealing apparent violation of Technical Specification 5.4.1.a, "Procedures," was identified after an operator error resulted in the failure to maintain the required cold overpressure mitigation system configuration while the reactor was in Mode 5. Technical Specification 3.4.12, "Cold Overpressure Mitigation System," prohibited more than one centrifugal charging pump from being capable of injecting into the reactor vessel. An operator inadvertently defeated administrative controls and enabled a centrifugal charging pump during a diesel generator and sequencer test restoration lineup on September 20, 2005. Contributing causes to the event were inadequate procedural controls and pre-job brief. This issue was entered into the corrective action program as Callaway Action Request 200507092. This finding, which involved the failure of an operator to follow procedure, was associated with the crosscutting area of human performance.

This finding is greater than minor because, if left uncorrected, it would have become a more significant safety concern involving the integrity of the reactor coolant system boundary (barrier integrity cornerstone). The finding was evaluated using Manual Chapter 0609, "Significance Determination Process," Appendix G, Shutdown Operations Significance, Checklist 2. Although the performance deficiency did not result in a Technical Specification violation, discussions with the Office of Nuclear Reactor Regulation identified a Phase 3 analysis should be performed and is currently under evaluation (Section 1R14).

Response to Finding:

1. NRC Manual Chapter 0612, dated 1/14/2004, defines "licensee-identified" findings as *"those findings identified through a licensee program or process that are specifically intended to identify the problem."* "Self Revealing" findings are defined as *"those findings that reveal themselves to either the NRC or licensee through a change in process, capability or functionality of equipment, or programs through routine operation"*

   This finding is more appropriately classified as "licensee identified" vice "self-revealing". Section 1R14b. of the inspection report stated in part: *"The operator ignored the administrative controls and unlocked and opened the discharge valve. The auxiliary operator returned the placard and lock to the test director. The test director recognized the inappropriate configuration and immediately had the improper alignment corrected."*

   The test director's application of critical thinking skills led to recognition of the incorrect lineup, given the activities in progress at the time. This discovery method is consistent with the definition of a "licensee-identified" finding. Identification of the condition did not result from an event such as a plant alarm, equipment actuation or change in plant conditions.

2. The description of the finding indicated that *"inadequate procedural controls and pre-job brief"* were contributing causes to the event. The root cause analysis, which was completed after the end of the inspection period, did not identify an issue with the procedure quality or pre-job brief. An adequate procedure was established, however, it was not followed.

3. As noted in the finding, *"Although the performance deficiency did not result in a Technical Specification violation, discussions with the Office of Nuclear Reactor Regulation identified a Phase 3 analysis should be performed and is currently under evaluation".*

   The error in question did result in the failure to meet the Limiting Condition for Operation (LCO) for Technical Specification 3.4.12, "Cold Overpressure Mitigation System" (COMS). The required action for not meeting the LCO is to *"Initiate action to verify a maximum of one centrifugal charging pump is capable of injecting into the RCS"* with a completion time of *"Immediately."* Because the required action was completed in the specified completion time, compliance with the COMS Technical Specification (TS) was maintained. As noted in the Enforcement Policy, a violation of the Technical Specification does not occur unless the required action and completion time cannot be met.

NRC Manual Chapter 0609, Significance Determinations Process, Appendix G Attachment 1, "Shutdown Operations, Significance Determination Process, Phase 1 Operational Checklist for Both PWRs and BWRs" requires a phase 2 or 3 analysis for non-compliance with COMS Technical Specifications. However, since there was no COMS Technical Specification non-compliance, the phase 3 analysis does not appear to be required.