

Power Reactor

Event # 40344

Site: CALLAWAY		Notification Date / Time: 11/20/2003 12:11 (EST)				
Unit: 1	Region: 4	State : MO	Event Date / Time: 11/20/2003 10:20 (CST)			
Reactor Type: [1] W-4-LP		Last Modification: 11/20/2003				
Containment Type: DRY AMB						
NRC Notified by: DAVID M EPPERSON		Notifications: KRISS KENNEDY R4				
HQ Ops Officer: JEFF ROTTON		JACK FOSTER NRR				
Emergency Class: NON EMERGENCY		WILLIAM RULAND NRR				
10 CFR Section:		BRIAN MCDERMOTT R1				
21.21	UNSPECIFIED PARAGRAPH	DAVID AYRES R2				
		CHRISTINE LIPA R3				
Unit	Scram Code	RX Crit	Init Power	Initial RX Mode	Curr Power	Current RX Mode
1	N	Yes	100	Power Operation	100	Power Operation

**LOW VOLTAGE CIRCUIT BREAKER DEFECT AND NONCOMPLIANCE REPORT**

Deviation related to upper stud assemblies for General Electric Nuclear AKR-30 low voltage circuit breakers. The deviation is specific to upper stud assemblies supplied under part number Q139C4632G1 and consist of an incorrect angle between the stud and pivot. Of the fifteen assemblies supplied with possible deviations to AmerenUE, five were returned and ten had been installed in Callaway Plant. The deviation will not prevent the circuit breakers from performing their design basis function at the Callaway Plant, however, the capability of the assemblies is indeterminate for severe faulted conditions. A circuit breaker could fail if an upper stud assembly with identified deviation was installed and the circuit breaker was called upon to interrupt a severe fault.

"Callaway has concluded that this deviation does not constitute a "defect" as defined in 10CFR Part 21 because the breakers would still perform their design basis requirements and would not create a substantial safety hazard. However, Callaway can not determine if the potential for a significant safety hazard or exceeding of a technical specification safety limit could exist at another nuclear power plant."

Received written documentation that the licensee has notified the NRC resident inspector.

\*\*\*\*\*

IE19



# Ameren UE

EVENT 40344

CALLAWAY NUCLEAR PLANT  
P. O. Box 620  
Fulton, MO 65251

FAX No. (573) 676- 4202

Verification No. (573) 676- 4277

Message Transmitted By:	<u>Swan</u>
Date:	<u>11-20-03</u>
Time:	<u>10:05</u> <input checked="" type="checkbox"/> A.M. <input type="checkbox"/> P.M.

DO NOT USE RED INK OR PENCIL

To: NRC Operations  
Company: \_\_\_\_\_  
Receiving FAX 301 816 5151  
Verification No. 301 816 5100

TOTAL PAGES: 3  
From: Joe Ready  
Extension: \_\_\_\_\_

Discard

Mail to Receiving Party  
(Please provide address)

Return to Sender

Instructions to Receiving Operator:

CA0021  
01/21/98  
N/A

AmerenUE  
Callaway Plant

Ronald D. Affolter  
Vice President - Nuclear

PO Box 620  
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573.676.8240  
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November 20, 2003

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

ULNRC-04921

Ladies and Gentlemen:

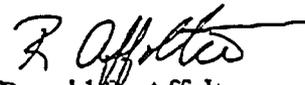
**DOCKET NUMBER 50-483  
CALLAWAY PLANT UNIT 1  
UNION ELECTRIC CO.  
FACILITY OPERATING LICENSE NPF-30  
10 CFR 21 notification for GE Nuclear AKR-30 low voltage circuit breaker  
upper stud assemblies, part number Q139C4632G1**

This notice is being sent within the two day period to inform you of a deviation related to upper stud assemblies for General Electric Nuclear AKR-30 low voltage circuit breakers.

The concern is specific to upper stud assemblies supplied under part number Q139C4632G1. The deviation consists of an incorrect angle between the stud and pivot. Of the fifteen assemblies supplied with possible deviations, to AmerenUE, five were returned and ten had been installed in Callaway Plant. The deviation will not prevent the circuit breakers from performing their design basis function at the Callaway Plant, however the capability of the assemblies is indeterminate for severe faulted conditions. A circuit breaker could fail if an upper stud assembly with the identified deviation was installed and the circuit breaker was called upon to interrupt a severe fault.

If you have any questions, please contact David M. Epperson at 573/676-4664 or via c-mail at [dmepperson@cal.ameren.com](mailto:dmepperson@cal.ameren.com).

Very truly yours,

  
Ronald D. Affolter  
Vice President, Nuclear

RDA/JER/slk

Enclosure

*a subsidiary of Ameren Corporation*

ULNRC-04921  
November 20, 2003  
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cc: Mr. Bruce S. Mallet  
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  
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Mr. Jack N. Donohew (2 copies)  
Licensing Project Manager, Callaway Plant  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Mail Stop 7E1  
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Manager, Electric Department  
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Records Center  
Institute of Nuclear Power Operations  
700 Galleria Parkway  
Atlanta, GA 30339

Enclosure: ULNRC04921

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Name and address of individuals informing the NRC: David M. Epperson  
(573) 676-4664  
AmerenUE  
P.O. Box 620  
Fulton, MO 65251

Basic component which contains a defect: G.E. Nuclear AKR-30 Low Voltage Circuit Breaker Upper Stud Assemblies, part number Q139C4632G1

Firm supplying basic component which contains a defect: General Electric Nuclear Energy

Nature of defect: The angle between the stud and pivot were less than indicated on the design drawing. This deviation results in an overlap between the moveable main and stationary arcing contacts which GE states is an untested and uncertified configuration. The assemblies will perform their design basis function however, the condition, function, operability, and capability of the assembly is indeterminate for severe faulted conditions.

Date on which information of the defect was obtained: 09-24-2003

Location of basic components containing defect: AmerenUE purchased 15 potentially defective assemblies. Five have been returned to GE. The remaining 10 assemblies have been installed in AKR-30 load center circuit breakers. GE states that AmerenUE/Callaway Plant is the only plant to receive defective upper stud assemblies. Callaway is not in the position to determine if similar assemblies with this defect have been supplied commercially, through third party dedication entities, or through GE overhaul facilities.

Corrective action which has been taken: Five defective assemblies were returned to GE. The locations of 10 potentially defective assemblies have been determined. Work documents have been initiated to inspect and rework, as necessary, all breakers that could have defective assemblies.

Advice related to the defect: Based on the information provided, Callaway has concluded that this deviation does not constitute a "defect" as defined in 10CFR Part 21 because the breakers would still perform their design basis requirements and would not create a substantial safety hazard. However, Callaway can not determine if the potential for a significant safety hazard or exceeding of a technical specification safety limit could exist at another nuclear power plant.