Union Electric
Callaway Plant

PO Box 620
Fulton, MO 65251

June 10, 2002

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

ULNRC-04676

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Gentlemen:

DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
UNION ELECTRIC CO.
FACILITY OPERATING LICENSE NPF-30
LICENSEE EVENT REPORT 2002-008-00
Non-conservative Technical Specification Allowable Value for Main Steam Line Pressure Negative Rate

The enclosed licensee event report is submitted in accordance with 10CFR50.73(a)(2)(ii)(B), to report a non-conservative Technical Specification Allowable Value for Main Steam Line Pressure Negative Rate.

Warren A. Witt

Warren A. Witt
Manager, Callaway Plant

WAW/ewh

Enclosure

IE22

cc: Mr. Ellis W. Merschoff
Regional Administrator
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

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

Manager, Electric Department
Missouri Public Service Commission
PO Box 360
Jefferson City, MO 65102

Mr. John O'Neill
Shaw, Pittman, Potts & Trowbridge
2300 N. Street N.W.
Washington, DC 20037

Records Center
Institute of Nuclear Power Operations
700 Galleria Parkway
Atlanta, GA 30339

Mr. Scott Bauer
Regulatory Affairs
Palo Verde NGS
P. O. Box 52034, Mail Station 7636
Phoneix, AZ 85072-2034

Mr. Dennis Buschbaum
Comanche Peak SES
P.O. Box 1002
Glen Rose, TX 76043

Mr. Scott Head
Supervisor, Licensing
South Texas Project NOC
Mail Code N5014
P.O. Box 289
Wadsworth, TX 77483

Mr. Pat Nugent
Supervisor, Licensing
Pacific Gas & Electric
Mail Stop 104/5/536
P.O. Box 56
Avila Beach, CA 93424

NRC FORM 366 (7-2001) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 7-31-2004

Estimated burden per response to comply with this mandatory information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
CALLAWAY PLANT UNIT 1	05000 483	1 OF 4

4. TITLE

Non-conservative Technical Specification Allowable Value for Main Steam Line Pressure Negative Rate

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
										05000
04	18	2002	2002	- 008 -	00	06	7	2002	FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE	1
10. POWER LEVEL	100

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR : (Check all that apply)

	20.2201(b)		20.2203(a)(3)(ii)	X	50.73(a)(2)(ii)(B)
	20.2201(d)		20.2203(a)(4)		50.73(a)(2)(iii)
	20.2203(a)(1)		50.36(c)(1)(i)(A)		50.73(a)(2)(iv)(A)
	20.2203(a)(2)(i)		50.36(c)(1)(ii)(A)		50.73(a)(2)(v)(A)
	20.2203(a)(2)(ii)		50.36(c)(2)		50.73(a)(2)(v)(B)
	20.2203(a)(2)(iii)		50.46(a)(3)(ii)		50.73(a)(2)(v)(C)
	20.2203(a)(2)(iv)		50.73(a)(2)(i)(A)		50.73(a)(2)(v)(D)
	20.2203(a)(2)(v)		50.73(a)(2)(i)(B)		50.73(a)(2)(vii)
	20.2203(a)(2)(vi)		50.73(a)(2)(i)(C)		50.73(a)(2)(viii)(A)
	20.2203(a)(3)(i)		50.73(a)(2)(ii)(A)		50.73(a)(2)(viii)(B)

	50.73(a)(2)(ix)(A)		
	50.73(a)(2)(x)		
	73.71(a)(4)		
	73.71(a)(5)		
	OTHER Specify in Abstract below or in NRC Form 366A		

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
Mark A. Reidmeyer	(573) 676-4306

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED			15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
	YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On 4/18/2002, during an extent of condition review concerning the neutron flux positive rate trip function, a concern was identified where Technical Specification (T/S) Table 3.3.2-1, Allowable Value for the Steam Line Pressure Negative Rate - High (HNPR), is less restrictive than the Safety Analyses Limit (SAL) credited in the Callaway Mode 3 Main Steam Line Break (MSLB) analysis.

T/S lists the allowable value for the HNPR function as less than or equal to 124 psi. T/S Bases lists the Nominal Trip Setpoint (NTS) for the HNPR function as less than or equal to 100 psi. The Safety Analysis Limit (SAL) for the HNPR function is 100 psi. Consequently, the current T/S allows the HNPR function to be set at a value less conservative than the value assumed in the safety analysis.

Corrective actions being evaluated include either decreasing the T/S Allowable Value from less than or equal to 124 psi to less than or equal to 100 psi, or revising the Callaway Mode 3 MSLB analysis to credit a HNPR SAL greater than or equal to 124 psi.

Because the plant was operating in Mode 1, there were no immediate operability concerns. A Generic Letter 91-18 Operability Determination was completed which included the required compensatory actions for T/S compliance if the plant is taken to Mode 3 with reactor coolant system pressure below the P-11 setpoint of 1970 psig.

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

I. DESCRIPTION OF THE REPORTABLE EVENT

A. REPORTABLE EVENT CLASSIFICATION

This event is reportable per 10 CFR 50.73(a)(2)(ii)(B), an unanalyzed condition.

B. PLANT OPERATING CONDITIONS PRIOR TO THE EVENT

Callaway Plant was in Mode 1 at 100 percent power.

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

There were no structures, systems, or components inoperable at the time of discovery and that contributed to this event.

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

On 4/18/2002, during an extent of condition review concerning the neutron flux positive rate trip function, a concern was identified where Technical Specification (T/S) Table 3.3.2-1, Allowable Value for the Steam Line Pressure Negative Rate - High (HNPR), is less restrictive than the Safety Analyses Limit (SAL) credited in the Callaway Mode 3 Main Steam Line Break (MSLB) analysis.

T/S lists the Allowable Value for the HNPR function as less than or equal to 124 psi. T/S Bases lists the Nominal Trip Setpoint (NTS) for the HNPR function as less than or equal to 100 psi. The Safety Analysis Limit (SAL) for the HNPR function is 100 psi. Consequently, the T/S allow the HNPR function to be set at a value less conservative than the value assumed in the safety analysis.

During startup or shutdown evolutions when safety injection on low Pressurizer pressure or low steamline pressure is blocked below Permissive P-11 (Pressurizer pressure less than 1970 psig), the HNPR rate signal is enabled by P-11 to provide steamline isolation. With Reactor Coolant System (RCS) Tavg greater than 450 degrees F, steamline isolation will be provided by the HNPR signal for break sizes greater than or equal to 0.02 sq. ft. Final Safety Analysis Report (FSAR) Steam System Piping Failure Analysis credits main steamline isolation on two out of three HNPR signals in any one loop during cooldown and heatup operations below P-11.

Corrective actions being evaluated include either decreasing the T/S Allowable Value from less than or equal to 124 psi to less than or equal to 100 psi or revising the Callaway Mode 3 MSLB analysis to credit a HNPR SAL greater than or equal to 124 psi.

Because the plant was operating in Mode 1, there were no immediate operability concerns. A Generic Letter 91-18 Operability Determination was completed. This evaluation included the required compensatory actions for T/S compliance if the plant is taken to Mode 3 with reactor coolant system pressure below the P-11 setpoint of 1970 psig.

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

This condition was identified during a review concerning the neutron flux positive rate trip function.

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

II. EVENT DRIVEN INFORMATION

A. SAFETY SYSTEMS THAT RESPONDED

Not Applicable.

B. DURATION OF SAFETY SYSTEM INOPERABILITY

This T/S item is applicable in Mode 3 below the P-11 (Pressurizer pressure less than or equal to 1970 psig) interlock. At the time of discovery, Callaway Plant was in Mode 1, and thus there was no immediate inoperability. During past plant shutdowns, this situation would have been applicable while below P-11 until the Main Steam Isolation Valves were closed. This typically is of a short duration while the plant transitions between Modes.

C. SAFETY CONSEQUENCES AND IMPLICATIONS OF THE EVENT.

This does not pose a significant safety consequence due to the plant parameters necessary to render this circumstance applicable. Typically, this unique combination of plant pressure and system lineups is only experienced while transitioning between Modes and is of a short duration. Additionally, a historical review of related surveillance documents revealed that the electronic circuitry associated with the T/S HNPR setpoint is extremely reliable. This review, consisting of sixty-nine surveillance documents, found that the HNPR setpoint bistables were always within calibration tolerances. Based upon the demonstrated reliability of the electronic circuitry and the rarity of operating the plant within the limited conditions necessary for this scenario, this does not pose a significant safety consequence.

III. CAUSE OF THE EVENT

Generic evaluations conducted by Westinghouse led to the incorrect selection of 124 psi as the T/S Table 3.3.2-1 Allowable Value for Steam line pressure high negative rate.

IV. CORRECTIVE ACTIONS

Corrective actions being evaluated include either decreasing the T/S Allowable Value from less than or equal to 124 psi to less than or equal to 100 psi, or revising the Callaway Mode 3 MSLB analysis to credit a HNPR SAL greater than or equal to 124 psi.

A Generic Letter 91-18 Operability Determination was completed. This evaluation included the required compensatory actions for T/S compliance if the plant is taken to Mode 3 with reactor coolant system pressure below the P-11 setpoint of 1970 psig.

V. PREVIOUS SIMILAR EVENTS

A review was conducted of LERs and Callaway Corrective Action Requests (CARs) covering the period of 4/18/99 to 5/29/02. There were no previous LERs or CARs documenting a similar event or occurrence.

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

VI. ADDITIONAL INFORMATION

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

System: JG

Component: Not Applicable – there was no faulted component.