



Callaway Plant

December 12, 1991


U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

ULNRC-2531

Gentlemen:

DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
FACILITY OPERATING LICENSE NPF-30
LICENSEE EVENT REPORT 91-007-00
FAILURE TO VERIFY LOAD REJECTION SURVEILLANCE
VALUE OF 1352 KW FOR EMERGENCY DIESEL GENERATORS
SINCE THIS VALUE DOES NOT REFLECT ACTUAL CONFIGURATION

The enclosed Licensee Event Report is submitted pursuant to 10CFR50.73(a)(2)(i) concerning inoperable Emergency Diesel Generators and subsequent entry into Technical Specification 3.0.3.


J. D. Blosser
Manager, Callaway Plant

JDB/TPS/JGB/lrj

Enclosure

cc: Distribution attached

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LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST, 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20549, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Callaway Plant Unit 1 DOCKET NUMBER (2) 050004831 PAGE (3) 1 OF 04

TITLE (4) Failure To Verify Load Rejection Surveillance Value Of 1352 Kw For Emergency Diesel Generators Since This Value Does Not Reflect Actual Configuration

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)	
11	14	91	91	007	00	12	12	91		050000	
										050000	

OPERATING MODE (9) 1

POWER LEVEL (10) 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5 (Check one or more of the following) (11)

<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 90.73(a)(2)(ix)	<input type="checkbox"/> 73.71(b)
<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 90.36(c)(1)	<input type="checkbox"/> 90.73(a)(2)(iv)	<input type="checkbox"/> 73.71(c)
<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 90.36(c)(2)	<input type="checkbox"/> 90.73(a)(2)(v)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
<input type="checkbox"/> 20.405(a)(1)(iv)	<input checked="" type="checkbox"/> 90.73(a)(2)(i)	<input type="checkbox"/> 90.73(a)(2)(viii)(A)	
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 90.3(a)(2)(e)	<input type="checkbox"/> 90.73(a)(2)(viii)(B)	
<input type="checkbox"/> 20.405(a)(1)(vi)	<input type="checkbox"/> 90.73(a)(2)(ii)	<input type="checkbox"/> 90.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME J. D. Blosser, Manager, Callaway Plant TELEPHONE NUMBER 314 676-8190

AREA CODE 314

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single spaced typewritten lines) (14)

On 11/13/91, utility management was notified by a similar plant that a potential concern existed with the ability to satisfy the 1352 Kilowatt (KW) Essential Service Water (ESW) pump load rejection requirement of Technical Specification (T/S) Surveillance 4.8.1.1.2.f(2). Utility management immediately initiated an investigation into the applicability to Callaway Plant. On 11/14/91 at 1515 CST, it was determined that the plant had not demonstrated verbatim compliance with T/S surveillance 4.8.1.1.2.f(2) and T/S 3.0.3 was entered. The plant was in Mode 1 - Power Operations at 100% reactor power.

The utility Shift Supervisor immediately scheduled a plant shutdown to begin at 1715 CST. On 11/14/91 at 1620 CST, a Temporary Waiver of Compliance was granted to waive the requirement to initiate action to shutdown the plant per T/S 3.0.3 until an emergency T/S amendment to change the 1352 Kw load rejection requirement was approved. The value of 1352 Kw is not representative of the actual installed configuration. The value was based on assumed load values used to size the diesel generators. The proposed change will clarify that the ESW pump is the largest single emergency load without specifying a Kw rating. Previous surveillance testing has verified the ability of the diesel generators to reject the largest single emergency load and maintain required voltage and frequency.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-830), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Callaway Plant Unit 1	DOCKET NUMBER (2) 0 5 1 0 0 0 4 8 3 9 1	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
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TEXT (1) more space is required use additional NRC Form 306A's (17)

BASIS FOR REPORTABILITY:

Technical Specification (T/S) 4.8.1.1.2.f(2) requires verification at least once per eighteen months, during shutdown, that each emergency diesel generator⁽¹⁾ is capable of rejecting a load of greater than or equal to 1352 Kilowatts (Kw) (representative of the single largest load - an Essential Service Water (ESW) pump⁽²⁾) while maintaining voltage and frequency requirements. On 11/14/91 at 1515 CST, utility engineers determined that 1352 Kw was not representative of the actual ESW pump load. Subsequently, the 1352 Kw T/S surveillance requirement had not been met since receipt of the Operating License and thus required entry into T/S 3.0.3. This event is reportable per 10CFR50.73(a)(2)(i) as a condition prohibited by T/S. A four hour phone notification was made to the NRC Operations Center on 11/14/91 at 1818 CST in accordance with 10CFR50.72(b)(2)(iii) and a plant procedure due to the T/S 3.0.3 entry. However, it was later determined that this condition would not have prevented the fulfillment of the safety function of the emergency diesel generators.

PLANT CONDITIONS AT TIME OF EVENT:

Mode 1 - Power Operations; 100% Reactor Power

DESCRIPTION OF EVENTS:

On 11/13/91, utility management was notified by a similar plant that their surveillance procedure did not verify the 1352 Kw load rejection requirement of T/S Surveillance 4.8.1.1.2.f(2). The other plant has similar ESW pumps and an identical 1352 Kw ESW pump T/S surveillance requirement. An investigation by utility management of the applicability to Callaway Plant was immediately initiated. Utility engineers reviewed a history of surveillances performed by plant procedures ISP-SA-2413A, Diesel Generator and Sequencer Testing (Train A) and ISP-SA-2413B, Diesel Generator and Sequencer Testing (Train B). The investigation revealed that surveillance procedures did not measure a diesel generator load rejection greater than or equal to 1352 Kw for the ESW pump. Subsequently, the Limiting Condition for Operation for T/S 3.8.1.1 had not been met since initial plant startup and T/S 3.0.3 was entered on 11/14/91 at 1515 CST.

The utility Shift Supervisor immediately initiated plans to start an orderly plant shutdown. As a precaution, the offsite source verification required by T/S 3.8.1.1 action (F) was completed at 1540.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH, P-6301, U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Callaway Plant Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 4 8 3 9 1	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
			0 0 7	0 0 0	3	OF 0 4

TEXT (If more space is required, use additional NRC Form 205A's) (17)

On 11/14/91, the Office of Nuclear Reactor Regulation (NRR) was contacted to request a Temporary Waiver of Compliance (TWOC) to waive the requirement to initiate action to shutdown the plant per T/S 3.0.3 until an emergency amendment to change the 1352 Kw requirement was approved. Based on the utility's assurance that surveillance testing had verified the ability of the diesel generator to reject the largest single emergency load (ESW pump) and maintain required voltage and frequency, the TWOC was granted at 1620 CST and T/S 3.0.3 was exited.

ROOT CAUSE

The 1352 Kw ESW pump load value specified in T/S 4.8.1.1.2.f(2) was based on assumed load values used to size the emergency diesel generators. This value is not representative of the actual installed configuration. The actual installed value is less than the 1352 Kw value. However, this value was used as the actual largest single diesel generator load when T/S 4.8.1.1.2.f(2) was developed and approved.

CORRECTIVE ACTION:

On 11/15/91, an emergency T/S change request was submitted to revise T/S Surveillance 4.8.1.1.2.f(2) to remove the numerical value of 1352 Kw for the largest single load required to be rejected for diesel generator testing. The proposed change will clarify that the ESW pump is the largest single emergency load without specifying a Kw rating.

SAFETY SIGNIFICANCE:

The basis for this surveillance testing was to meet the recommendation of Regulatory Guide 1.9, Selection, Design, Qualification and Testing of Diesel Generator Units Used As Onsite Electric Power Systems at Nuclear Power Plants, to ensure diesel generator capability to reject the largest single load while maintaining voltage and frequency requirements. The surveillance testing performed to date has verified the ability of the diesel generators to reject the largest single emergency load (the ESW pump) and maintain required emergency diesel generator voltage and frequency. This event, therefore, did not adversely affect or endanger the health or safety of the general public or involve a significant safety hazard.

PREVIOUS OCCURRENCES:

None.

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		9 1	- 0 0 7	- 0 0	0 4	OF 0 4

TEXT (If more space is required, use additional NRC Form 365A's) (17)

FOOTNOTES:

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

- (1) System EK, Component DG
- (2) System BI, Component P