

UNION ELECTRIC COMPANY
CALLAWAY PLANT

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ULNR -981

DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
FACILITY OPERATING LICENSE NPF-30
LICENSEE EVENT REPORT 84-056-00
INADVERTENT ENGINEERED SAFETY FEATURES ACTUATIONS

Gentlemen:

The enclosed Licensee Event Report is submitted pursuant
to 10 CFR 50.73(a)(2)(iv) concerning inadvertent Engineered Safety
Features actuations.

Andrew P. Neuhaffer

AN S. E. Miltenberger
Manager, Callaway Plant

MET/WRR/JWK/drs
Enclosure

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

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Callaway Plant Unit 1

YEAR		SEQUENTIAL NUMBER		REVISION NUMBER																	
0	5	0	0	0	4	8	3	8	4	-	0	5	6	-	0	0	0	2	OF	0	3

TEXT / If more space is required, use additional NRC Form 366A's (17)

At 0513 CDT on 10/22/84 and 1527 on 10/23/84, Engineered Safety Features (ESF) were actuated with Reactor Trips occurring shortly thereafter. High/low steam generator (S/G) levels obtained while rolling the main turbine initiated the Feedwater Isolations (FWIS), Auxiliary Feedwater Actuators (AFAS), S/G Blowdown Isolations (SCBDIS), and Reactor Trips. The ESF equipment performed as designed in both cases.

1. At 0054 on 10/22/84 while in Mode 1, the main turbine was rolling at 1800 r.p.m. and the reactor was at a power level of approximately 9.5%. At 0132 the operators began increasing Reactor Power to 15%. While waiting to synchronize to the grid, the turbine exhaust hood temperatures and the turbine vibration were increasing. At 0501 the operator was instructed to select "close valves" to shutdown the turbine. Immediately after he selected "close valves" the turbine tripped from high exhaust hood temperature.

The operators began reducing Reactor Power and at 0509 broke the condenser vacuum to slow the turbine. The start of both motor-driven Auxiliary Feedwater Pumps caused level variations in the S/Gs and at 0513 a high level in S/G "B" initiated a FWIS, AFAS, and SCBDIS. Reactor Power had been reduced to 4.2% and Mode 2 had been entered when these actuations occurred.

At 0521, the reactor tripped due to a low S/G "D" level. Reactor Power had been further reduced to 3.5% when the trip occurred. Emergency Operating Procedures E-0, Reactor Trip or Safety Injection, and ES-0.1, Reactor Trip Recovery, were performed and the plant stabilized. The FWIS was reset to restore feed from the condenser. While recovering from the incident, a second Reactor Trip signal and FWIS was received at 0553 due to a low level in S/G "D."

2. At 1510 on 10/23/84 while in Mode 1, the reactor was at approximately 15% power and the operators were in the process of rolling the main turbine. At approximately 400 r.p.m., increasing, the Condenser Available Interlock (C-9) for the steam dump valves began to cycle on and off causing the steam dump valves to cycle.

When steam was dumped a C-9 signal was initiated and the steam dumps closed. As sufficient vacuum was regained, thus clearing the C-9 interlock, the steam dumps reopened. Continued steam dump cycling caused level oscillations in the S/Gs.

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FACILITY NAME (1)

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LER NUMBER (5)

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Callaway Plant Unit 1

YEAR SEQUENTIAL REVISION
NUMBER NUMBER NUMBER

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TEXT (If more space is required, use additional NRC Form 388A's) (17)

At 1527 a S/G "B" high level initiated a FWIS, AFAS, and SGBDIS. The main turbine, which was at 1400 r.p.m., also tripped. At 1531, the reactor tripped on a low S/G "C" level caused by the drop in feedwater temperature when the FWIS and AFAS occurred. The operators performed Emergency Operating Procedures E-0 and ES-0.1 and stabilized the plant.

The high exhaust hood temperature which caused the Turbine Trip on 10/22/84 was due to running the main turbine unloaded for an excessive period of time. To prevent recurrence of this incident, a precaution regarding running the main turbine unloaded for longer than one hour was added to Normal Operating Procedure OTN-AC-00001, Main Turbine and Generator Systems, on 10/31/84.

The problem experienced with steam dump cycling on 10/23/84 has been corrected by rolling the main turbine up to speed at 5 to 10% Reactor Power rather than 15%, thus reducing the amount of steam being dumped to the condenser. General Operating Procedure OTG-ZZ-00003, Plant Startup Less Than or Equal to 5% to 20% Power, was revised on 11/5/84 to implement this corrective action. No further corrective action for either incident is deemed necessary.

There was no damage to plant equipment or release of radioactivity as a result of these incidents. At no time did these events pose a threat to the public health or safety.

Previous occurrences: none