

March 13, 2000



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

ULNRC-4203

Gentlemen:

**DOCKET NUMBER 50-483
UNION ELECTRIC CO.
CALLAWAY PLANT UNIT 1
FACILITY OPERATING LICENSE NPF-30
MONTHLY OPERATING REPORT
FEBRUARY, 2000**

The enclosed Monthly Operating Report for February, 2000 is submitted pursuant to Section 6.9.1.8 of the Callaway Unit 1 Technical Specifications.

Warren A. Witt for
R. D. Affolter
Manager, Callaway Plant

RDA/DDM/slk

Enclosure

IE24

ULNRC-4203

March 13, 2000

Page 2

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 Donohew (2 copies)
Licensing Project Manager, Callaway Plant
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop OWFN-4D3
Washington, DC 20555-2738

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

Mr. Thomas A. Baxter
Shaw, Pittman, Potts, & Trowbridge
2300 N. Street N.W.
Washington, DC 20037

Enclosure
ULNRC-4203
March 13, 2000

DOCKET NO.: 50-483
UNIT NAME: CALLAWAY UNIT 1
COMPLETED BY: D. D. Monell
TELEPHONE: 573/676-8171
FAX: 573/676-4202

PART A - OPERATIONS SUMMARY:

During the month of February, Callaway operated at 100% power, until February 13th, when the plant experienced an automatic actuation of the reactor protection system (RPS). The event was initiated by a disturbance on the transmission system. This disturbance caused the 'B' reactor coolant pump (RCP) to trip when the motor sensed a current imbalance. Subsequently, loss of the RCP tripped the reactor on a low reactor coolant flow condition. Upon receiving the RPS actuation, licensed operators stabilized the plant in accordance with emergency procedures. All safety-related and nonsafety-related systems functioned per design.

The reactor was returned to criticality and brought back online February 14th. Callaway Plant returned to full power on February 16th.

PART B - PORV AND SAFETY VALVE SUMMARY:

Following the reactor trip, the three remaining RCPs and all main circulating water pumps tripped on current imbalance. Due to all RCPs being tripped, the pressurizer spray system was unavailable. Additionally, with all main circulating water pumps tripped, the main condenser was not available as a heat sink. Natural circulation was established and atmospheric steam dumps were used to bypass the turbine. The reactor coolant system (RCS) average temperature (Tave) increased causing the pressurizer pressure to reach the setpoint of the power-operated relief valves (PORVs). Both PORVs momentarily lifted once. The reactor protection systems responded to the event per their design.

Enclosure
ULNRC-4203
March 13, 2000

PART C
AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO: 50-483
UNIT: Callaway Unit 1
COMPLETED BY: D. D. Monell
TELEPHONE: 573/676-8171
FAX: 573/676-4202

MONTH: February, 2000

AVERAGE DAILY POWER LEVEL		AVERAGE DAILY POWER LEVEL	
<u>DAY</u>	<u>(MWe-Net)</u>	<u>DAY</u>	<u>(MWe-Net)</u>
1	1,158	17	1,150
2	1,156	18	1,150
3	1,153	19	1,149
4	1,156	20	1,144
5	1,157	21	1,137
6	1,154	22	1,137
7	1,153	23	1,134
8	1,158	24	1,132
9	1,152	25	1,140
10	1,152	26	1,153
11	1,161	27	1,149
12	1,161	28	1,143
13	1,010	29	1,143
14	251	30	
15	1,127	31	
16	1,146		

PART D
OPERATING DATA REPORT

DOCKET NO.: 50-483
 UNIT NAME: CALLAWAY UNIT 1
 COMPLETED BY: D. D. Monell
 TELEPHONE: 573/676-8171
 FAX: 573/676-4202

OPERATING STATUS:

	(FEBRUARY)	<u>YR TO DATE</u>	<u>CUMULATIVE</u>
1. REPORTING PERIOD:			
GROSS HOURS IN REPORTING PERIOD:	696	1440	133215
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 3565			
MAX. DEPEND. CAPACITY (MWe-Net): 1125			
DESIGN ELECTRICAL RATING (MWe-Net): 1171			
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY) (MWe-Net): 100%			
4. REASONS FOR RESTRICTION (IF ANY):			

	<u>THIS MONTH</u>	<u>YR TO DATE</u>	<u>CUMULATIVE</u>
5. NUMBER OF HOURS REACTOR WAS CRITICAL	674.0	1418.0	119,021.0
6. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
7. HOURS GENERATOR ON-LINE	668.4	1412.4	117,300.1
8. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
9. GROSS THERMAL ENERGY GENERATED (MWH)	2,327,865	4973680.0	395,862,188
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	787,648	1688482.0	134,916,799
11. NET ELECTRICAL ENERGY GENERATED (MWH)	750,470	1611791.0	128,393,342
12. REACTOR SERVICE FACTOR	96.80	98.50	89.30
13. REACTOR AVAILABILITY FACTOR	96.80	98.50	89.30
14. UNIT SERVICE FACTOR	96.00	98.10	88.10
15. UNIT AVAILABILITY FACTOR	96.00	98.10	88.10
16. UNIT CAPACITY FACTOR (Using MDC)	95.80	99.50	85.70
17. UNIT CAPACITY FACTOR (Using Design MWe)	92.10	95.60	82.30
18. UNIT FORCED OUTAGE RATE	3.16	1.53	2.09

19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):
 None

20. IF SHUT DOWN AT END OF REPORTING PERIOD, ESTIMATE DATE OF STARTUP:

Enclosure
 ULNRC-4203
 March 13, 2000

PART E
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO.: 50-483
 UNIT NAME: CALLAWAY UNIT 1
 COMPLETED BY: D. D. Monell
 TELEPHONE: 573/676-8171
 FAX: 573/676-4202

REPORT MONTH: FEBRUARY, 2000

<u>NO.</u>	<u>DATE</u>	<u>TYPE</u> F: FORCED S: SCHEDULED	<u>DURATION</u> (HOURS)	<u>REASON</u>	<u>METHOD OF</u> <u>SHUTTING DOWN</u> <u>THE REACTOR OR</u> <u>REDUCING POWER</u>	<u>CORRECTIVE</u> <u>ACTIONS/COMMENTS</u>
01	2/13/2000	F	22	H	3	UNPLANNED OUTAGE DUE TO TRANSMISSION DISTURBANCE (LER 2000 002-00) DERATE: RAMP UP FROM EVENT
02	2/14/2000	F	0	H		

SUMMARY

During the month of February, Callaway operated at 100% power, until February 13, when the plant experienced an automatic actuation of the reactor protection system (RPS). The event was initiated by a disturbance on the transmission system. This disturbance caused the 'B' reactor coolant pump (RCP) to trip when the motor sensed a current imbalance, subsequently loss of the RCP tripped the reactor on a low reactor coolant flow condition. Upon receiving the RPS actuation, licensed operators stabilized the plant in accordance with emergency procedures.

Following the reactor trip, the three remaining RCPs and all main circulating water pumps tripped also caused by the current imbalance. Due to all RCPs being tripped, the pressurizer spray system was unavailable. Additionally, with all main circulating water pumps tripped, the main condenser was not available as a heat sink. Natural circulation was established and atmospheric steam dumps were used to bypass steam to the turbine. The reactor coolant system (RCS) average temperature (Tave) increased causing the pressurizer pressure to reach the setpoint of the power-operated relief valves (PORVs). Both PORVs momentarily lifted once. All safety-related and nonsafety-related systems functioned per design. The reactor was returned to criticality and brought back online February 14th. Callaway Plant returned to full power on February 16th.

Enclosure

ULNRC-4203

March 13, 2000

REASON

- A: EQUIPMENT FAILURE (EXPLAIN)
- B: MAINT. OR TEST
- C: REFUELING
- D: REGULATORY RESTRICTION
- E: OPERATOR TRAINING AND LICENSE EXAMINATION
- F: ADMINISTRATION
- G: OPERATIONAL ERROR (EXPLAIN)
- H: OTHER (EXPLAIN)

METHOD

- 1: MANUAL
- 2: MANUAL SCRAM
- 3: AUTOMATIC SCRAM
- 4: OTHER (EXPLAIN)