



Northern States Power Company

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November 6, 1992

10 CFR Part 50
Section 50.73

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

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
Docket Nos. 50-282 License Nos. DPR-42
50-306 DPR-60

One Unit 1 Steam Generator Safety Valve Setpoint Found 3% Low

The Licensee Event Report for this occurrence is attached.

Please contact us if you require additional information related to this event.

Thomas M Parker
Manager
Nuclear Support Services

c: Regional Administrator - Region III, NRC
NRR Project Manager, NRC
Senior Resident Inspector, NRC
Kris Sanda, State of Minnesota

Attachment

9211120104 921106
PDR ADOCK 05000282
S PDR

Test 1/1

LICENSEE EVENT REPORT (LER)

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-530), 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)

Prairie Island Nuclear Generating Plant Unit 1

DOCKET NUMBER (2)

0 5 0 0 0 2 8 2 1 OF 0 3

PAGE (3)

TITLE (4)

One Unit 1 Steam Generator Safety Valve Setpoint Found 3% Low

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)

Prairie Island Unit 2 0 5 0 0 0 3 0 1 6

0 5 0 0 0 1 1

OPERATING MODE (9)

N

20.402(b)

20.405(c)

50.73(a)(2)(iv)

73.71(b)

POWER LEVEL (10)

1

20.405(a)(1)(i)

50.36(a)(1)

50.73(a)(2)(v)

73.71(c)

20.405(a)(1)(ii)

50.36(a)(2)

50.73(a)(2)(vi)

OTHER (Specify in Abstract below and in Text, NRC Form 365A)

20.405(a)(1)(iii)

XX 50.73(a)(2)(i)

50.73(a)(2)(vii)(A)

20.405(a)(1)(iv)

50.73(a)(2)(ii)

50.73(a)(2)(vii)(B)

20.405(a)(1)(v)

50.73(a)(2)(iii)

50.73(a)(2)(ix)

LICENSEE CONTACT FOR THIS LER (12)

NAME

Arne A Hunstad

TELEPHONE NUMBER

AREA CODE

6 1 1 2 3 1 8 1 - 1 1 1 2 1 1

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)

EXPECTED SUBMISSION DATE (15)

MONTH DAY YEAR

YES (If yes, complete EXPECTED SUBMISSION DATE)

XX NO

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

On October 7, 1992, the Unit 1 reactor coolant system was being heated up in preparation for a restart after a maintenance outage. At about 0102 hours hot shutdown was reached. At this point, with main steam isolation valves closed, reactor coolant system temperature is limited to 552 degrees F (1050 psig steam generator pressure) by use of the steam generator power-operated relief valves.

At about 0200 hours, the control room operators responded to a fire alarm which is located in the area of the main steam safety valve header for No. 12 Steam Generator. An outplant operator sent to investigate the area reported to the control room that he had heard one or more safety valves discharging. After further investigation, it was decided that the safety valves on the header should be tested.

Testing of all 5 valves on the main steam safety valve header for No. 12 Steam Generator showed 4 valves to be within 1% of their setpoints, but the valve with the nominal setpoint of 1077 psig was found with a setpoint of 1041 psig. Its setpoint was adjusted to within the required range. Plant startup was resumed at about 1030 hours.

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 INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)		DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Prairie Island Unit 1		05000 282	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	OF 2 3
			92	014	00	

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

EVENT DESCRIPTION

On October 7, 1992, the Unit 1 reactor coolant system was being heated up in preparation for a restart after a maintenance outage. At about 0102 hours hot shutdown was reached; this condition is defined, in part, as reactor coolant system average temperature at 547 degrees F. At this point, reactor coolant system temperature is limited to 547 degrees F (1005 psig steam generator pressure) by use of the steam dump system, if the main steam isolation valves are open, or to 552 degrees F (1050 psig steam generator pressure) by use of the steam generator power-operated relief valve, if the main steam isolation valves are closed. In this case, the main steam isolation valves were closed.

At about 0200 hours, the control room operators responded to a fire alarm which is located in the area of the main steam safety valve header for No. 12 Steam Generator: an outplant operator was sent to investigate. On this header are mounted the power-operated relief valve and 5 safety valves with nominal setpoints of 1077, 1093, 1110, 1120 and 1131 psig. The outplant operator inspecting the area reported to the control room that he had heard one or more safety valves discharging. After investigation, it was decided that the safety valves on the header should be tested, so the control room operators borted to the cold shutdown concentration so the reactor coolant system could be cooled slightly in preparation for the testing.

Testing of all 5 valves on the main steam safety valve header for No. 12 Steam Generator showed 4 valves to be within 1% of their setpoints, but the valve with the nominal setpoint of 1077 psig was found with a setpoint of 1041 psig. Its setpoint was adjusted to within the required range. Plant startup was resumed at about 1030 hours.

CAUSE OF THE EVENT

Cause of the event is apparent personnel error in setting the valve previously. The hydraulic device used to set the valves has a pressure gauge which is difficult to read properly, and, in fact, during a simulation with the device, a workman misread the gauge. Review of the test records shows that this valve's setpoint was adjusted downward about 30 psig when it was last adjusted in August 1988. (A discrepancy of 30 psig in the as-found condition of the valve was not reportable in August 1988 because the setpoints were not specified in Technical Specifications in effect at that time.)

LICENSEE EVENT REPORT (LER)

TEXT CONTINUATION

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ANALYSIS OF THE EVENT

Technical Specification 3.4.A.1.a requires that "Ten steam generator safety valves shall be OPERABLE with lift settings of 1077, 1093, 1110, 1120 and 1131 psig plus or minus 1% except during testing." Since one valve was found to operate about 3% below its setpoint, the event is reportable pursuant to 10CFR50.73(a)(2)(i)(B).

CORRECTIVE ACTION

All five safety valves on the discharge header were tested. Four of the five were found within 1% of their nominal setpoints. The fifth valve was found 3% outside its nominal setpoint; the valve was adjusted to within 1% of its nominal setpoint.

Procedure and hardware fixes are being investigated that will make it easier to obtain consistent results with the hydraulic setting device.

FAILED COMPONENT IDENTIFICATION

None.

PREVIOUS SIMILAR EVENTS

There have been no previous similar events reported at Prairie Island.