



Northern States Power Company

414 Nicollet Mall
Minneapolis, Minnesota 55401-1927
Telephone (612) 330-5500

February 28, 1994

10CFR 20.407 and
Technical Specification
Sections 6.7.A.1.a, 6.7.A.1.b
and 6.7.A.1.c

US Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

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

Annual Report of Occupational Radiation Exposure and Safety
Relief Valve Challenges - January 1 through December 31, 1993

Attached are three reports for 1993:

- 1) Annual Report of Occupational Exposure
(Required by Technical Specification 6.7.A.1.a and 10 CFR Part 20,
Section 20.407)
- 2) Annual Report of Safety and Relief Valve Failures and Challenges
(Required by Technical Specification 6.7.A.1.b)
- 3) Annual Primary Coolant Iodine Spike Report
(Required by Technical Specification 6.7.A.1.c)

This letter contains no new NRC commitments, nor does it modify any prior commitments.

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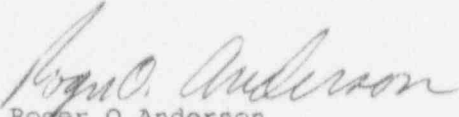
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USNRC

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Please contact Jack Leveille (612-388-1121, Ext. 4662) if you require additional information concerning these reports.



Roger O Anderson

Director

Licensing and Management Issues

cc: Director, Office of Nuclear Regulatory Research
Regional Administrator-III, NRC
NRR Project Manager, NRC
Resident Inspector, NRC
State of Minnesota,
Attn: Kris Sanda

Attachments: 1- Occupational Exposure Report (4 pages)
2- Report of Safety/Relief Valve Failures and Challenges (1 page)
3- Primary Coolant Spike Report (1 page)

ATTACHMENT 1

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
ANNUAL REPORT OF OCCUPATIONAL RADIATION EXPOSURE

1993

NORTHERN STATES POWER COMPANY
 Prairie Island Nuclear Generating Plant
 1717 Wakonade Drive East
 Welch, MN 55089

License No. DPR-42/DPR-60 & SNM-2506
 (Unit 1, Unit 2 & ISFSI)

Number of Personnel and Man-Rem by Work and Job Function
 1993

Work/Job Function	Number of Persons > 0.100			Total Man-Rem		
	Station	Utility	Contract	Station	Utility	Contract
Reactor Ops/Surv						
Operators	0	0	0	1.003	0.0	0.0
Maintenance	1	0	0	0.760	0.430	0.026
Supv & Engr	0	1	0	0.358	0.421	0.220
Health Physics	4	0	0	1.664	0.006	0.141
Instr & Control	0	0	0	0.256	0.0	0.0
Security	0	0	0	0.0	0.0	0.0
Routine Maintenance						
Operators	0	0	0	0.073	0.0	0.0
Maintenance	7	16	1	2.287	4.721	0.136
Supv & Engr	2	1	0	0.835	0.154	0.018
Health Physics	0	0	0	0.188	0.0	0.020
Instr & Control	2	0	0	0.808	0.0	0.008
Security	0	0	0	0.0	0.0	0.0
Special Maintenance						
Operators	2	0	0	2.844	0.0	0.0
Maintenance	18	68	9	4.234	21.523	2.438
Supv & Engr	6	3	13	1.899	1.198	4.869
Health Physics	5	2	11	1.884	0.424	2.706
Instr & Control	4	0	0	1.161	0.0	0.008
Security	0	0	0	0.0	0.0	0.0

DPR-42/DPR-60/SNM-2506

Work/Job Function	Number of Persons > 0.100			Total Man-Rem		
	Station	Utility	Contract	Station	Utility	Contract
Waste Processing						
Operators	0	0	0	0.050	0.0	0.0
Maintenance	2	0	0	1.066	0.196	0.029
Supv & Engr	0	0	0	0.015	0.037	0.0
Health Physics	3	0	0	1.161	0.0	0.048
Instr & Control	0	0	0	0.002	0.0	0.0
Security	0	0	0	0.0	0.0	0.0
Refueling						
Operators	0	0	0	0.550	0.0	0.0
Maintenance	21	14	0	5.410	4.890	0.024
Supv & Engr	0	0	0	0.394	0.081	0.0
Health Physics	1	0	0	0.492	0.019	0.154
Instr & Control	0	0	0	0.0	0.0	0.103
Security	0	0	0	0.0	0.0	0.0
Inservice Inspection						
Operators	0	0	0	0.0	0.0	0.0
Maintenance	0	38	20	0.638	9.049	10.615
Supv & Engr	0	0	12	0.167	0.095	4.684
Health Physics	2	0	4	0.527	0.001	1.073
Instr & Control	0	0	19	0.0	0.0	4.910
Security	0	0	0	0.0	0.0	0.0
Unassigned				0.0	0.0	0.182
Sub totals						
Operators	2	0	0	4.520	0.0	0.0
Maintenance	49	136	30	14.395	40.712	13.268
Supv & Engr	8	5	25	3.668	1.986	9.791
Health Physics	15	5	15	5.916	0.450	4.142
Instr & Control	0	0	19	2.227	0.0	5.029
Security	0	0	0	0.0	0.0	0.0
Grand Total	80	143	89	30.726	43.148	32.412
Total Dose						106.286

NORTHERN STATES POWER COMPANY

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1717 Wakonade Drive East
Welch, MN 55089

License No. DPR-42/DPR-60/SNM-2506
(Unit 1, Unit 2 & ISFSI)

ANNUAL 10CFR PART 20.407 REPORTING
1993

DOES RANGE (REM)	NUMBER OF INDIVIDUALS IN EACH RANGE
No Measurable	687
Measurable exposure less than 0.10	215
0.1 to 0.25	154
0.25 to 0.50	117
0.50 to 0.75	40
0.75 to 1.00	6
1.00 to 2.00	0
2.00 to 3.00	0
3.00 to 4.00	0
4.00 to 5.00	0
5.00 to 6.00	0
6.00 to 7.00	0
7.00 to 8.00	0
8.00 to 9.00	0
9.00 to 10.0	0
10.0 to 11.0	0
11.0 to 12.0	0
Greater than 12.0	0
Total number of individuals reported	1219
Total Dose	106.286

ATTACHMENT 2

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

ANNUAL REPORT OF SAFETY/RELIEF VALVE FAILURES AND CHALLENGES

1993

This report is made in accordance with NUREG-0737, Item II.K.3.3 and Prairie Island Technical Specification 6.7.A.1.b and covers the period from January 1 through December 31, 1993.

Unit 1 - No failures or challenges

Unit 2 - Failures

None.

Challenges

12/19/93 Pressurizer Power Operated Relief Valves lifted automatically when the turbine generator control system caused power swings (generator megawatts suddenly went from 486 MW to 515 MW followed by a sudden drop of 100 megawatts). This resulted in a reactor coolant system pressure increase above the setpoints for the relief valves. The valves closed with no problems upon the subsequent decrease in reactor coolant system pressure.

ATTACHMENT 3

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
ANNUAL REPORT OF OCCUPATIONAL RADIATION EXPOSURE
1993

This report is made in accordance with Prairie Island Technical Specification 6.7.A.1.c and covers the period of January 1, 1993 through December 31, 1993.

Prairie Island Technical Specification 3.1.D.1 was not exceeded during 1991.