Northern States Power Company

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

January 5, 1993

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

Low Level Liquid Waste Tank Released
Without Prior Sample Due to Personnel Error

The Licensee Event Report for this occurrence is attached.

This report contains the following commitment:

> The Liquid Release Instructions shall require the Shift Supervisor to verify that the Liquid Waste Tank Pre-Release Authorization form for the tank of the same number is attached.

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

Thomas M Parker
Director
Nuclear Licensing

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

Attachment

IE22
1/1

NRC FORM 366 (6-89) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92
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)	DOCKET NUMBER (2)	PAGE (3)
Prairie Island Nuclear Generating Plant Unit 1	0 5 0 0 0 2 8 2	1 OF 0 4

TITLE (4): Low Level Liquid Waste Tank Released Without Prior Sample Due to Personnel Error

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)
1 2	0 6	9 2	9 2	– 0 1 6	– 0 0	0 1	0 5	9 3	Prairie Island Unit 2	0 5 0 0 0 3 0 6
										0 5 0 0 0

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Arne A Hunstad	6 1 2 3 8 8 – 1 1 2 1

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)

	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO			

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

On December 6, 1992, both units were in cold shutdown. Preparations were being made for release of the liquid contents of No. 121 and No. 122 Aerated Drains Treatment Monitor Tanks (ADTMT). (Floor drainage and equipment leakage is collected in the liquid rad waste system. After processing through filters and ion exchangers, water is pumped into 121 and 122 ADTMT for sampling, analysis and release.) A sample of No. 122 ADTMT was taken and analyzed and a Liquid Waste Tank Pre-Release Authorization form was completed. This form, for No. 122 ADTMT, and the Liquid Release Instructions for No. 121 ADTMT were mistakenly combined into one package and sent to the control room. The discrepancy in tank numbers was not caught and the wrong tank was released (approximately 5,000 gallons). The release was monitored by a radiation instrument capable of terminating the release upon indication of high radiation. Sampling of the remaining volume of the released tank showed that the release was a small fraction (about 0.2%) of Technical Specification release rate limits. Procedure changes have been made to prevent recurrence.

EVENT DESCRIPTION

On December 6, 1992, both units were in cold shutdown. Preparations were being made for release of the liquid contents of No. 121 and No. 122 Aerated Drains Treatment Monitor Tanks (ADTMT). (Floor drainage and equipment leakage is collected in the liquid rad waste system. After processing through filters and ion exchangers, water is pumped into 121 and 122 ADTMT for sampling, analysis and release.)

Liquid Release Instructions for both No. 121 and No. 122 ADTMT's were lying on the table in the lab. The night shift Auxiliary Building Operator had placed No. 122 ADTMT on recirculation in preparation for sampling before its release. At about 0145 the night shift chemist sampled and analyzed the contents of No. 122 ADTMT. Results of the analysis become part of the Liquid Waste Tank Pre-Release Authorization form. The chemist then laid this form aside for turnover to the day shift, which was coming on at 0600, since further approvals were needed for release of the tank. When this was done, the Liquid Waste Tank Pre-Release Authorization form for No. 122 ADTMT was laid on top of the Liquid Release Instructions for No. 121 ADTMT.

At 0200 the Auxiliary Building Operator placed No. 121 ADTMT on recirculation for sampling.

At 0910 the day-shift chemist obtained the necessary approval to complete the Liquid Waste Tank Pre-Release Authorization Form for No. 122 ADTMT, picked up the Liquid Release Instructions for No. 121 ADTMT, stapled the package together and took the paperwork to the control room for their action. At 0950 the Shift Supervisor approved the liquid release.

At about 1015 the Unit 1 Lead Plant Equipment Operator coordinated with the Auxiliary Building Operator in testing of the liquid waste discharge radiation monitor, R-18. When the monitor functional test was complete, the Auxiliary Building Operator was given approval for the release. At 1040 the Auxiliary Building Operator released No. 121 ADTMT in accordance with the Liquid Release Instructions. At 1200 the release was complete.

At 1400 the day-shift chemist proceeded to sample No. 121 ADTMT in preparation for its release and found it empty. At this point the chemist thought the tank numbers had been confused and proceeded to sample No. 122 ADTMT. Upon returning to the lab, the chemist noted that the previous sample was also from the same tank. The chemist reviewed the completed paperwork, determined what had happened, and notified the chemist's supervisor. At 1735 the Shift Supervisor was notified that the wrong ADTMT had been released. The chemist sampled and analyzed the remaining volume in No. 121 ADTMT. Sample results showed that the release had been a small fraction (about 0.2%) of Technical Specification release rate limits.

CAUSE OF THE EVENT

Personnel error by the chemist in attaching the Liquid Release Instructions for No. 121 ADTMT to the Liquid Waste Tank Pre-Release Authorization Form for No. 122 ADTMT.

ANALYSIS OF THE EVENT

The activity released from No. 121 ADTMT was at about 0.2% of the Technical Specification release rate limit. This was shown by sampling the remaining volume of water in the tank after the release. The analysis showed results similar to the water in No. 122 ADTMT. It is known that the activity in the contents of each No. 121 and No. 122 ADTMT's was comparable because both tanks received water from the same source and were filled within hours of each other.

Liquid Waste Discharge Monitor R-18 was operable during the release to insure Technical Specifications were not exceeded. Health and safety of the public were unaffected. Nonetheless, the event is reportable pursuant to 10 CFR Part 50, Section 50.73(a)(2)(i)(b) as a violation of Technical Specification 4.17.A.1.B since a prior sample was not taken.

CORRECTIVE ACTION

When the error was discovered by the day shift chemist, the chemist's supervisor was notified, and the Shift Supervisor was notified. The chemist verified the activity in the tank that was released and showed that the release was a small fraction of Technical Specification limits.

Changes to the Liquid Waste Tank Pre-Release Authorization form and to the Liquid Release Instructions have been made to prevent recurrence. Specifically, the tank number and corresponding procedure number on the Liquid Waste Tank Pre-Release Authorization form have been enlarged and bolded to make them stand out. Also, a step was added to the Liquid Release Instructions that requires the Shift Supervisor to verify that the Liquid Waste Tank Pre-Release Authorization form for the tank of the same number is attached.

FAILED COMPONENT IDENTIFICATION

None.

PREVIOUS SIMILAR EVENTS

A previous unplanned release was reported as AO 75-20, but that event was caused by equipment failure.