

Commonwealth Edison Company  
Dresden Generating Station  
6500 North Dresden Road  
Morris, IL 60450  
Tel 815-942-2920



July 3, 1996

JSPLTR #96-0102

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

Licensee Event Report 96-008, Docket 50-237 is attached and is being submitted pursuant to 10CFR50.73(a)(2)(i)(B) which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications.

This correspondence contains the following commitment:

As part of the chemistry technician continuing training program, training will conduct increased awareness of technical specification sampling importance. This will concentrate on how the technician conforming to technical specification sampling requirements is paramount in contributing to reactor safety and protection of the public. Chemistry management personnel will also attend this training. (NTS 237-180-96-00801)

If you have any questions, please contact Pete Holland, Dresden Regulatory Assurance Supervisor at (815) 942-2920 extension, 2714.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Stephen Perry", is written over the typed name.

J. Stephen Perry  
Site Vice President  
Dresden Station

Enclosure

cc: H. Miller, Regional Administrator, Region III  
NRC Resident Inspector's Office  
Illinois Department of Nuclear Safety

9607100028 960703  
PDR ADOCK 05000237  
S PDR

**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 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)**  
Dresden Nuclear Power Station, Unit 2

**DOCKET NUMBER (2)**  
0500237

**PAGE (3)**  
1 OF 5

**TITLE (4)**  
Non-Routine Sample Time Requirement Exceeded Due to Chemistry Technician 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 NAME	DOCKET NUMBER
06	07	96	96	-- 008 --	00	07	03	96	None	
									FACILITY NAME	DOCKET NUMBER

<b>OPERATING MODE (9)</b>	N	<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)</b>				
		20.2201(b)		20.2203(a)(3)(i)	50.73(a)(2)(iii)	73.71(b)
<b>POWER LEVEL (10)</b>	100	20.2203(a)(1)		20.2203(a)(3)(ii)	50.73(a)(2)(iv)	73.71(c)
		20.2203(a)(2)(i)		20.2203(a)(4)	50.73(a)(2)(v)	OTHER
		20.2203(a)(2)(ii)		50.36(c)(1)	50.73(a)(2)(vii)	(Specify in Abstract below and in Text, NRC Form 366A)
		20.2203(a)(2)(iii)		50.36(c)(2)	50.73(a)(2)(viii)(A)	
		20.2203(a)(2)(iv)	X	50.73(a)(2)(i)	50.73(a)(2)(viii)(B)	
		20.2203(a)(2)(v)		50.73(a)(2)(ii)	50.73(a)(2)(x)	

**LICENSEE CONTACT FOR THIS LER (12)**

<b>NAME</b>	M. Thacker, Chemistry Department	<b>TELEPHONE NUMBER (Include Area Code)</b>	(815) 942-2920
	Ext. 2828		

**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

<b>IS SUPPLEMENTAL REPORT EXPECTED (14)</b>	X	<b>NO</b>	<b>EXPECTED SUBMISSION DATE (15)</b>	MONTH	DAY	YEAR
<b>YES (if yes, complete EXPECTED SUBMISSION DATE).</b>						

**ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)**

Service Water (SW) Radiation monitor sample requirements of Technical Specification (TS) Table 3.2.4, Action A, which requires twelve hour grab samples of the Service Water Effluent Gross Activity Monitor were not met. A Chemistry Technician failed to obtain the sample within the time requirements of the TS requirements. Valid samples were taken approximately 14 hours after the SW radiation monitor was last sampled successfully. The twelve hour sample criteria was thus exceeded by two hours due to a personnel error by the Chemistry Technician. Corrective actions included disciplinary action to the technician. No radioactive releases to the environs occurred and thus the safety significance is minimal.

NRC FORM 366A (5-92)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95			
<b>LICENSEE EVENT REPORT (LER)</b> 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 (MNB 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.			
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				96	-- 008 --	00	

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

EVENT IDENTIFICATION:

Non-routine sample time requirement exceeded due to chemistry technician personnel error.

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 2                                      Event Date: 06/07/96                                      Event Time: 1235  
 Reactor Mode: N                                      Mode Name: Shutdown                                      Power Level: 0%  
 Reactor Coolant System Pressure: 0 psig

B. DESCRIPTION OF EVENT:

This LER is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B) which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications.

Technical Specification (TS) Table 3.2.4 requires twelve hour grab samples of the service water effluent for gross activity with the service water effluent gross activity radiation monitor inoperable. At 1400 on 6/07/96 it was determined that this requirement was not met due to a personnel error by a Chemistry Technician. A valid TS sample was obtained at 1430 on 6/07/96 and the required sampling interval was exceeded by approximately two hours.

On 6/07/96 the Unit 2 Service Water Effluent Gross Activity Monitor (Service Water Radiation Monitor) was inoperable. The monitor was determined inoperable and the requirements of Technical Specification Table 3.2.4 were effective since 5/31/96 due to low service water system flow.

At 0035 on 6/7/96 Chemistry personnel performed an isotopic analysis of the service water effluent. The sample was analyzed at 0118 on 6/7/96 and the activity was less than the lower limit of detection (LLD) for the instrument used.

Chemistry Technician A [non-licensed technician] assumed the duties of the unit chemistry technician at 0700 on 6/7/96. Turnover between technicians is facilitated by DCS 6210-06 "Dresden Chemistry Surveillances" Attachment A which is entitled "Chemistry Shift Turnover Sheet". The turnover sheet from the off-going technician included instructions that the Service Water Radiation Monitor sample was last taken at 0035 on 6/7/96 and was due to be sampled at 0800. Per requirements of DCS 6210-06 "Dresden Chemistry Surveillances" the sample has an eight hour sample frequency and thus was required at 0805. Technician A acknowledged the turnover instructions as required by DCS 6210-06, Attachment A, Chemistry Shift Turnover Sheet.

At approximately 0800 Technician A then proceeded to analyze several demineralized water samples which required analyzing from the previous day. The Technician became so involved with the Demineralized samples that he forgot that the Service Water Radiation Monitor was due to be sampled at 0805 per the requirements of DCS 6210-06 and at 1205 per the requirements of the TS.

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

At 1400 Shift operating personnel contacted Chemistry Technician A and inquired as to the status of the required service water sample which was due at 0800. The technician then was reminded of the sample requirement and informed the Lab Supervisor of the missed sample.

At 1430 Technician A sampled the Service Water Radiation Monitor for the Technical Specification requirement. The sample was analyzed at 1442 on 6/7/96 and the activity was less than the lower limit of detection (LLD) for the instrument used. The Service water effluent TS sampling requirement was satisfied and sampling resumed every eight hours in accordance with DCS 6210-06 in order to meet Technical Specification Table 3.2.4 Action A twelve hour requirements.

C. CAUSE OF EVENT:

The cause of this event was a personnel error, NRC Cause Code A, by the Chemistry Technician A who did not take the Unit 2 service water effluent within the requirements of the Technical Specifications, specifically the requirements for an twelve hour interval between samples was not met. Additionally the requirements of DCS 6210-06 to sample the system every eight hours was not met.

Chemistry Technicians are non-licensed positions. There were no adverse environmental conditions which contributed to the event.

D. SAFETY ANALYSIS:

The purpose of the service water gross activity monitor is to monitor for radioactive materials present in service water and ensure no unmonitored release of radioactive materials to the environment. By design the service water pressure is maintained at a higher pressure than all system loads to ensure leakage is from the service water system to the associated load. This design feature ensures that during any time that the monitoring system is inoperable no unmonitored radioactive releases could occur from the service water system. The service water sample collected at 0035 on 6/7/96 ensured that the system was free from radioactivity. Although beyond the Technical Specification time sampling criteria, the service water sample collected at 1430 on 6/7/96 verified that the system was free from radioactivity. Previous samples of service water during the period of monitor inoperability did not indicate that the beta/gamma activity was more than the LLD for the instrument used. These sample results reasonably indicate that no unmonitored release of activity was occurring during the 14 hour period between valid Service Water Radiation Monitor samples. The safety significance of the event is thus minimal.

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E. CORRECTIVE ACTIONS:

Chemistry Technician A received disciplinary action for failing to take the sample within the required interval. The Technician agrees with the root cause and acknowledges the error.

As part of the chemistry technician continuing training program, training will conduct increased awareness of technical specification sampling importance. This will concentrate on how the technician conforming to technical specification sampling requirements is paramount in contributing to reactor safety and protection of the public. Chemistry management personnel will also attend this training. (NTS 237-180-96-00801)

Compliance with technical specifications and the standard of 100 % compliance with technical specifications has been stressed to the technician workforce and their supervisors.

F. PREVIOUS OCCURRENCES:

LER/Docket Number Title

96-003/05000237 Non-Routine Sample Time Requirement Exceeded Due to Chemistry Technician Personnel Error

During planned corrective maintenance on the Unit 3 Service Water (SW) Radiation monitor the requirements of Technical Specification (TS) Table 3.2.4, Action A, which requires twelve hour grab samples of the Service Water Effluent Gross Activity Monitor was not met. A Chemistry Technician obtained the initial sample to meet the TS requirements from the water volume isolated from the station service water by the valve isolation boundary established for the maintenance activity. The initial sample taken to satisfy the requirement was thus not representative of the service water discharge to the environs and was invalid. Valid samples were taken fifteen hours after the SW radiation monitor was isolated. The twelve hour sample criteria was thus exceeded by three hours due to a personnel error by the Chemistry Technician. Corrective actions included disciplinary action to the technician. No radioactive releases to the environs occurred and thus the safety significance is minimal.

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95-013/05000237 Inadequate Sampling of Service Water Effluent Due to Use of a Superseded Procedure and Recent System Configuration Change

On July 5, 1995, at 0630 hours, a System Engineer (SE) performed a walkdown of the Service Water (SW) Effluent Radiation Monitor sample system and discovered that two normally open system valves had been throttled. This reduced pressure to SW sample eductor, resulting in inadequate sampling of the SW effluent. The SE reported this to the Work Execution Center (WEC). An Equipment Attendant (EA) was dispatched to restore sample flow. This event occurred due to an EA using a superseded procedure to backflush the system sample line. The EA's inappropriate actions were reinforced through recent training that the EA had received on the superseded SW Effluent Radiation Monitor sample system procedure. The corrective actions are: (1) to provide up to date training for all station personnel, (2) to correct station procedure distribution and (3) enhanced communication methods for all personnel in training.

92-018/05000237 Sample not analyzed within required time period due to personnel error

Dresden Unit 3 Service Water had not been analyzed for beta/gamma activity for a nineteen hour and thirty-nine minute period. Because the Unit 3 Service Water Monitor was inoperable, a service water sample was collected at 2000 hours on July 23, 1992 and the analysis was not performed in a timely manner. Corrective actions included disciplinary action for the Chemistry Technician. Procedures DCS 6240-01, DCS 6280-01 and DCS 6290-01 were revised to perform gamma isotopic analysis on service water samples whenever the appropriate unit's service water gross activity monitor is inoperable. DAP 16-05 was revised to record time and date the last service water sample was collected and the time and date the last service water sample was analyzed for each unit. These procedural enhancements were in place at the time of the subject LER and would not be expected to preclude the Chemistry Technician A's personnel error in performing the sampling procedures of LER 2-96-008.

G. COMPONENT FAILURE DATA:

There were no component failures associated with this event.