



Commonwealth Edison
Dresden Nuclear Power Station
R.R. #1
Morris, Illinois 60450
Telephone 815/942-2920

January 20, 1993

CWS LTR #92-719

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

Attached please find Licensee Event Report 92-27-01, Docket 050237. This revised report is submitted to provide further information concerning corrective actions.

Gary L. Smith

for Charles W. Schroeder
Station Manager
Dresden Nuclear Power Station

CWS/vlt

Enclosure

cc: A. Bert Davis, Regional Administrator, Region III
NRC Resident Inspector's Office
File/NRC
File/Numerical

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Dresden Nuclear Power Station, Unit 2	Docket Number (2) 0 5 0 0 0 2 13 7	Page (3) 1 of 0 4
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Title (4) Failure to Sample Reactor Water Due to Personnel Error and Programatic Weakness

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)
0 8	0 6	9 2	9 2	0 2 7	0 1	0 8	2 4	9 2		0 5 0 0 0
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OPERATING MODE (9) POWER LEVEL (10) 0 0 3	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)			
		<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
		<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)
		<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> Other (Specify in Abstract below and in Text)
		<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
		<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
		<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

Name Tom Johnson, Operations Staff	Ext. 3527	TELEPHONE NUMBER AREA CODE 8 1 5	9 4 2 - 2 9 2 0
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15)	Month Day Year
<input checked="" type="checkbox"/> Yes (If yes, complete EXPECTED SUBMISSION DATE)	<input type="checkbox"/> NO

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

On August 6, 1992 at 1025 hours, with Unit 2 in Start Up at 3% rated core thermal power, it was determined that reactor coolant sampling for conductivity and chloride had inadvertently been suspended contrary to Technical Specification requirements. This had minimal safety significance because the continuous conductivity recorder data were normal and dissolved oxygen was not a concern at the existing steaming rate of greater than 100,000 pounds per hour.

The root cause of the event has been attributed to personnel error on the part of a Chemistry Supervisor and Chemistry Technician to suspend sampling without notifying Operating Supervision. Also contributing was the lack of a tracking mechanism for surveillances generated by Technical Specification limiting condition of operations (LCO's).

Corrective actions include a written Technical Specification interpretation of the requirement, procedure changes to reflect this interpretation, counselling of the chemists involved, training on the event with licensed operators, and development of a tracking program for surveillances generated by Technical Specification LCO's.

There have been no previous events of this type.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]

PLANT AND SYSTEM IDENTIFICATION:

General Electric - Boiling Water Reactor - 2527 Mwt rated core thermal power.

Nuclear Tracking System (NTS) tracking code numbers are identified in the text as (XXX-XXX-XX-XXXXX).

EVENT IDENTIFICATION:

A. CONDITIONS PRIOR TO EVENT:

Unit: 2 Event Date: August 6, 1992 Event Time: 1025 Hours

Reactor Mode: N Mode Name: Startup Power Level: 3%

Reactor Coolant System (RCS) Pressure: 430 psig

B. DESCRIPTION OF EVENT:

On August 6, 1992, with Unit 2 in Start Up at 3% rated core thermal power, it was determined that a four hour reactor water sample for conductivity and chlorides was not taken as required by Technical Specification 4.6.C.2. The Technical Specification requires that reactor water be sampled for conductivity and chlorides once every four hours during start-up and at steaming rates below 100,000 lbs. hr. The Shift Control Room Engineer (SCRE) contacted Chemistry to begin taking the required samples at 1130 hours on August 5, 1992. At 1930 hours, with Unit 2 start-up in progress, a Chemistry Technician called the SCRE by telephone to report the latest samples results and questioned whether reactor water samples needed to be continued. The SCRE checked the unit steaming rate and found it to be in excess of 1000,000 lb/hr. The SCRE referred to the Technical Specification incorrectly interpreted the requirements believing that the sampling could be terminated above 100,000 lbs/hr, and told the Chemistry Technician that sampling could be terminated. After the conversation, the SCRE referred to the applicable chemistry sampling procedure and discovered that the procedure required that samples be taken under the current condition. The SCRE immediately called the Chemistry Technician back on the telephone and told the technician that per the chemistry sample procedure sampling was still required. After the conversation with the SCRE, the technician questioned a Chemistry Supervisor about the sampling requirements. After verifying that the unit steaming rate was over 100,000 lbs/hr on the process computer, the Chemistry supervisor instructed the technician to stop sampling contrary to the procedure guidance. The Chemistry Supervisor did not reference the Chemistry sampling procedure, Dresden Chemistry Surveillance (DCS) 6130-01, "Technical Specification Chemistry." The Chemistry Technician stopped taking samples but never notified the control room or the SCRE that sampling had been terminated.

After the conversation between the Chemistry Technician and the SCRE had taken place, Unit 2 start-up went on hold for approximately 15 hours due to a vacuum leak in the main condenser. During this time, the Chemistry Department did not report any chemistry sample results. The afternoon and midnight shift SCRE's did not notice the sample results were missing. The condenser vacuum problem was resolved and start-up was resumed on August 6, 1992, at approximately 1000 hours. At 1025 hours, the day shift SCRE realized that the required samples were not being obtained and promptly suspended start-up. Chemistry samples were requested and the results were communicated to the control room at 1216 hours. Start-up resumed after verification that the sample results were within limits.

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C. APPARENT CAUSE OF EVENT:

This report is being submitted in accordance with 10CFR50.73(a)(2)(i)(B) which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications within 30 days of the event. Personnel error and programmatic weakness have been identified as the contributing cause for this event.

1. The SCRE initially incorrectly interpreted the Technical Specification sampling requirement and led the Chemistry Technician to believe that sampling could be terminated when the steaming rate exceeded 100,000 lbs/hr.
2. The Chemistry Supervisor failed to follow the chemistry sampling procedure and advised the technician to terminate the required sampling.
3. The Chemistry Technician failed to notify the SCRE that the sampling had been terminated.
4. Two SCRE's failed to identify that the required sample results were not reported over a 15 hour period.
5. No station tracking program exists for surveillances generated by Technical Specification LCO conditions to ensure that the surveillances are performed in the required time interval and Operating personnel are informed of results or problems in a timely manner.

D. SAFETY ANALYSIS OF EVENT:

The purpose of monitoring the conductivity and chloride in reactor water is to assure that conditions do not develop which are favorable for the occurrence of Chloride Stress Corrosion Cracking (CSCC) on the reactor vessel and internals. During plant startup evolutions, reactor water can contain sufficient dissolved oxygen which in conjunction with chloride and heat will accelerate CSCC. When steaming rates exceed 100,000 pounds per hour during the startup evolution, the dissolved oxygen is effectively removed from the reactor water such that the CSCC mechanism is minimized. During the period in which the grab samples were not obtained, the continuous conductivity recorder maximum reading was 0.1 micro-mho per centimeter. This maximum conductivity value assures that at no time was the chloride above the 0.1 ppm LCO and thereby, the conditions for accelerated CSCC did not exist. Therefore, the safety significance is minimal.

E. CORRECTIVE ACTIONS:

The following corrective actions were initiated regarding this event.

The individuals involved in the event were counselled on the correct interpretation of the Technical Specification. The Chemistry Supervisor was additionally counselled on the importance of procedural adherence.

Dresden Station has initiated a tracking program for surveillances generated by Technical Specification LCO conditions. This program will provide accountability for completion of the surveillances in the required time interval and will flag operating personnel as they come due or past due. A Personal Computer (PC) has been installed in the Control Room for this purpose. The Shift Control Room Engineer will input the surveillances generated by Technical Specification LCO conditions.

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A memo, clarifying the Technical Specification Interpretation for Section 3/4.6.c.2 and this event, was sent to all senior licensed operators. Training will be provided by December 31, 1992.

A Technical Specification Interpretation for Section 3/4.6.c.2 was issued.

Procedure changes were made to Dresden Chemistry Surveillances (DCS) 6130-01, 6240-01, 6280-01, and DAP 16-05 Attachment 2, Chemistry Shift Turnover Sheet, to clarify the requirements in accordance with the Technical Specification Interpretation for section 3/4.6.c.2.

F. PREVIOUS EVENTS:

There have been no previous events of this type.

G. COMPONENT FAILURE DATA:

There were no component failures involved; therefore, an NPRDS data base search was not conducted.