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ComEd

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TPJLTR 95-0092

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

Licensee Event Report 95-013, Docket 50-237 is being submitted as required by Technical Specification 6.6 and 10CFR50.73(a)(2)(i).

Sincerely,

Thomas P. Joyce
Site Vice President

TPJ:pt

Enclosure

cc: H. Miller, Regional Administrator, Region III
NRC Resident Inspector's Office
File/NRC
File/Numerical

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NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

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.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Dresden Nuclear Power Station, Unit 2	05000237	1 OF 6

TITLE (4)
Inadequate Sampling of Service Water Effluent Due to Use of a Superseded Procedure and Recent System Configuration Change

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
07	03	95	95	-- 013 --	00	08	02	95	None	
									FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)	000		20.2201(b)		20.2203(a)(3)(i)		50.73(a)(2)(iii)		73.71(b)
			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)

NAME	TELEPHONE NUMBER (Include Area Code)
R. Fenili, Operations Staff Ext. 2917	(815) 942-2920

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 15 single-spaced typewritten lines) (16)

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.

EVENT IDENTIFICATION:

Inadequate Sampling of Service Water Effluent Due to Use of a Superseded Procedure and Recent System Configuration Change

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 2 Event Date: July 3, 1995 Event Time: approx. 0100

Reactor Mode: N Mode Name: Shutdown Power Level: 0%

Reactor Coolant System Pressure: 0 psig

B. DESCRIPTION OF EVENT:

Part of the normal Equipment Attendant (EA) operator round responsibility on the midnight shift is to perform backflushing of the Unit 2 Service Water Radiation Monitor [IL] Sample System. This activity identifies Dresden Operating Procedure (DOP 1700-21) "Flushing Unit 2 Service Water Effluent Radiation Monitor" as the appropriate procedure.

July 3, 1995, on the midnight shift, the EA made a copy of DOP 1700-21 for the task of backflushing the Unit 2 Service Water Effluent Radiation Monitor System. His procedure copy was obtained from the "For Information Only" procedure books in the Work Execution Center (WEC). Unknown to the EA, an Interim Procedure (IP 95-99), "Flushing Unit 2 Service Water Effluent Radiation Monitor", had been written and approved for use June 6, 1995. This occurred while the EA was off shift studying for the final EA Exam. IP 95-99 superseded DOP 1700-21 and was not included in the WEC procedure books due to the "Information Only" status of the books.

IP 95-99 was initiated due to system configuration change to the Service Water Radiation Monitoring system for normal operation. Previously, the 2-3999-670 "U2 Service Water Effluent Rad Monitor Eductor Drive Water Inlet Valve", and the 2-3999-675 "U2 Service Water Effluent Rad Monitor Eductor Discharge Manual Pressure Control Valve" were throttled to control the sample flow rate. With these valves throttled, the sample flow rate was found to be inconsistent and prevented the system from being declared operable. Under IP 95-99, these valves are no longer throttled, they are to be in the full open position. This new position allows the sample eductor to provide adequate motive force to draw a continuous representative sample from the sample header.

At 0100 on July 3, 1995, the EA performed the backflushing of the Radiation Monitor piping, using the superseded procedure in hand and returned the system valves to throttled positioned as specified in DOP 1700-21. With the eductor flow decreased, sample flow from the header was less-than-adequate to meet the system design, rendering the system inoperable.

On July 4, 1995 a routine Unit 2 Reactor Building Closed Cooling Water system chemistry sample was taken. The results of the activity analysis was normal. In addition, the Operations Manager requested a sample of the Unit 2 Service Water. The results of the chemistry activity analysis were at the Lower Limit of Detectibility (LLD).

At 0630 on July 5, 1995, the System Engineer performed a system walkdown and observed that 2-3999-670 and 2-3999-675 valves were throttled. The throttled position of the valves results in reduced pressure for the eductor. The System Engineer observed that: (1)there was low sample system pressure, (2) the sample system flow indicator paddle wheel was at a low speed and (3) the positions of the valve stems did not indicate a full open position. This resulted in reduced motive force and improper sampling of the Service Water effluent. The System Engineer immediately reported his observation to the Field Supervisors Office.

Control room personnel were unaware of this condition because there was sufficient sample water flow to prevent the low flow alarm from annunciating in the Control Room.

An EA was immediately dispatched to the SW Radiation Monitor area, to troubleshoot the reduced sample flow, with the System Engineer. The EA went to the Field Supervisors Office, obtained a copy of the IP 95-99 from the Control Room, to determine the proper valve lineup for verification. He went to the SW Effluent Radiation Monitor and opened 2-3999-670 and 2-3999-675 valves, in accordance with the IP. Once Service Water Radiation Monitoring system sample flow was restored, the monitor was declared operable (July 5, 1995 at 0800 hrs).

No one in the Radiation Protection Department was notified that the Unit 2 SW Radiation Monitor system was in operable from July 3, 1995 at 0100 hours to July 5, 1995 at 0630 hours. They were also not notified once the system was determined to be inoperable from July 5, 1995 at 0630 hours to 0800 hours. There was no immediate request for a sample of Unit 2 service water to be taken for isotopic analysis once the system was determined to be inoperable.

When the system sample inlet and outlet valves were fully opened, and the system declared operable, no Unit 2 Service Water radiation monitor alarms were noted.

As a result of this event, from July 3, 1995, at 0100 hours through July 5, 1995, at 0800 hours, the Service Water Radiation Monitor was inoperable. When the Service Water Effluent Radiation Monitor is inoperable, the Technical Specification requirement of Table 3.2.4 is: "With less than the minimum of operable channels, release via this pathway may continue, provided that at least once per 12 hours grab samples are collected and analyzed for beta or gamma activity at an LLD of less than or equal to 10E-7 uCi/ml". The grab samples were not been taken nor analyzed during the period when the equipment was inoperable. This resulted in a noncompliance with Technical Specification Table 3.2.4 requirement.

C. CAUSE OF EVENT:

This report is submitted pursuant to 10CFR50.73(a)(2)(i)(B) - any event or condition prohibited by the plant's Technical Specifications.

During the EA's training, it was an accepted station practice to obtain a copy of the needed procedure from the WEC procedure books. The WEC procedure books were classified as "REGISTERED" and controlled the same as procedures in the control room. This means they are maintained with current revisions, all Temporary Procedures (TPs) and all Interim Procedures (IPs). It also means that

the procedures are available for IN-PLANT use. The TPs and IPs supersede the current revision of a procedure.

During the period from April 24, 1995 to June 2, 1995, the Auxiliary Operators were removed from their Operating Teams to take their final EA Exams. The procedure revision distribution process was changed during this period. The WEC procedure books were changed from "REGISTERED" status, to a "For Reference Only" status. This means that these procedures are not for IN-PLANT use. No mechanism existed to ensure that trainees studying to take their final EA Exams were made aware of this change. When the recently qualified EA made a copy of the procedure, he had not been made aware of the status change of the WEC procedure books.

The cause of the event was a Management Deficiency to adequately communicate a change in station administrative procedures to EA's when they were studying to take their final EA Exam. Because of this, the EA obtained a superseded procedure. He was unaware that during the time he was studying and taking the final EA Exam that the process for procedure control had changed.

During the Equipment Attendants Initial operator training, the SW Rad Monitor system was operated with the sample valving throttled. The EA's knowledge of the system was based on his previous On-The-Job-Training (OJT) and reinforced by the procedural steps in hand. His confidence level was high that his performance of the task was proper. From late June 1995 through early August 1995, all Operating EA's were scheduled to receive training on the modified Service Water Radiation Monitor configuration, which was based on the IP. The involved EA was scheduled to receive the new training during the week of August 1, 1995.

D. SAFETY ANALYSIS:

The safety significance of this event was minimal. There were no heat exchanger pressure boundary leaks into the Service Water System during the time of the event. This was evidenced by no alarms on the Reactor Building Closed Cooling Water Service Water Radiation Monitor.

Unit 2 Reactor Building Closed Cooling Water system and Unit 2 Service Water chemistry activity analysis that were taken on July 4, 1995 were normal and Lower Limit of Detectability (LLD) respectively.

Although the sample flow was not at design limits, there was sample flow as indicated by the throttled position of the valves and the system pressures. Because there was some sampling occurring the detector was evaluating service water effluent in a limited capacity. With reduced sample flow the monitor would have taken some unknown extended time to alarm if there were measurable nuclide in the service water.

The worst case event would require leaks in two heat exchangers (Shutdown Cooling to RBCCW and RBCCW to Service Water) during normal operation. Any release would have been detected during normal sampling or by the RBCCW Service Water Monitor and Fuel Pool Cooling monitor.

E. CORRECTIVE ACTIONS:

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

The first immediate corrective action was to dispatch the System Engineer and EA to correct the system lineup and open the sample flow inlet and outlet valves for the Service Water Effluent Radiation Monitor. (Completed)

The Second immediate corrective action was to post signs and labels on the WEC procedure books and files that indicate they are to be "For Reference Only" usage.

Further corrective actions were as follows:

A discussion was held with the EA regarding his role in this event. His knowledge deficiency regarding the new system valve configuration, and the new method for obtaining a procedure for IN-PLANT use was corrected. (Completed)

A Operating Department Memo was sent to all Operating Teams to clarify, during their crew discussions, the new method for acquiring an approved procedure for IN-PLANT use. (Completed)

The Dresden Training Department has re-trained all EA's on the current Unit 2 Service Water Radiation Monitor configuration. (Completed)

The WEC procedure books status have been re-instated to a "Registered" and controlled the same as control room procedures. This was based on an evaluation of Dresden station procedure files. (Completed)

A station tailgate will be created to inform all station personnel of the proper use of controlled procedures, and where controlled procedures are located. (NTS# 237-180-95-01301)

The Operating Staff Supervisor will develop appropriate internal communication methods to ensure that all Operator Trainees are made aware of major plant events and process changes which occur while in the Training environment. (NTS# 237-180-95-01302)

Dresden Operating Department procedures will be reviewed and revised to require Radiation Protection Management be immediately notified when a radioactive monitoring system becomes inoperable, and have a sample immediately taken for analysis. (NTS# 237-180-95-01303)

System Engineering will evaluate the adequacy of the existing Unit 2 Service Water Effluent Monitor low flow alarm. (NTS# 237-180-95-01304)

The Semi Annual Effluent Report requirements will be evaluated by Radiation Protection to determine if this event needs to be include with its calculations and documented with the report. (NTS# 237-180-95-01305)

F. PREVIOUS OCCURRENCES:

There have been previous occurrences of missing sampling requirements, however, the corrective actions from those events would not have prevented this event.

G. COMPONENT FAILURE DATA:

None.