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

ComEd

February 7, 1996

PGHLTR 96-0005

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

Licensee Event Report 95-014, Revision 1, Docket 50-249 is being submitted pursuant to 10CFR50.73(a)(2)(iv) any event that results in automatic or manual actuation of any Engineered Safety Feature (ESF).

This supplement is being submitted to modify corrective action E.4. This commitment is modified to state:

> Investigate the basis for the vacuum breaker settings and change DMP 1600-01 and DMS 1600-03 to provide greater operating margin to prevent unnecessary valve operations. DAN 902(3)-4 G-14, DAN 902(3)-4 H-14 and DOS 1600-09 will be revised to include field setpoints. (SCN: 249-180-95-01403).

Sincerely,

Frank A. Spangenberger

Peter G. Holland
Regulatory Assurance Supervisor

PGH/JW:pt

Enclosure

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

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IE22
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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 3	05000249	1 OF 4

TITLE (4)
Unexpected Operation of the Pressure Suppression Chamber To Drywell Vacuum Breakers Due to Inadequate Training and Procedure Deficiency

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
09	07	95	95	-- 014 --	01	02	07	96	None	
									FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	N
POWER LEVEL (10)	000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

	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)	X	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)		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)
Jesse Williams, System Engineer Ext. 2708	(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 September 9, 1995, at 2233 hours with Unit 3 in startup at 1 percent thermal power, all twelve Pressure Suppression Chamber (Torus) to Drywell Vacuum breakers (3-1601-32A, B, C, D, E, F AND 33A, B, C, D, E, F) opened while relieving negative pressure in the torus per Dresden Operating Procedures (DOP) 1600-1. This constitutes an unexpected actuation of an Engineered Safety Feature. Initial drywell pressure was -0.16 psig, and torus pressure was -0.21 psig. When torus pressure increased to 0 psid all twelve vacuum breakers cycled open. Cause was due to training and procedure deficiencies. Technical Specifications (TS) require Torus to Drywell Vacuum Breakers to open fully with applied force at all valve positions not exceeding the equivalent to 0.5 psi acting on torus face of the valve disk. Operations was aware of the TS requirement but was not aware of actual valve setpoint. DOP 1600-1 instructs operators on how to relieve containment pressure but did not contain a warning that vacuum breakers may open, therefore operators did not expect vacuum breakers to open. Startup continued, however, an administrative heatup rate limit of 25 degrees F per hour was initiated pending an investigation of vacuum breaker set points and an evaluation of startup plans. Setpoints were found to be correct, and administrative heatup limit was removed.

EVENT IDENTIFICATION:

Unexpected Operation of the Pressure Suppression Chamber To Drywell Vacuum Breakers Due to Inadequate Training and Procedure Deficiency

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 3 Event Date: 09/09/95 Event Time: 2233

Reactor Mode: N Mode Name: Startup Power Level: 1%

Reactor Coolant System Pressure: 90 psig

B. DESCRIPTION OF EVENT:

On September 9, 1995, at 2233 hours with Unit 3 in startup at 1 percent power, all twelve Suppression Chamber (Torus) to drywell vacuum breakers [BF] (3-1601-32A, B, C, D, E, F and 33A, B, C, D, E, F) opened while relieving negative pressure in the torus per Dresden Operating Procedures (DOP) 1600-1, Normal Pressure Control of The Drywell or Torus. The initial drywell pressure was -0.16 psig, and the initial Pressure Suppression pressure was -0.21 psig. When the torus pressure increased to 0 psid all twelve vacuum breakers opened. This constitutes an unexpected actuation of an Engineered Safety Feature. The procedural actions taken by the operators caused the ESF actuation. At 0128 hours, an Event Notification System (ENS) telephone call was made to the Nuclear Regulatory Commission to report the event.

The startup continued, however, the Shift Manager initiated a primary coolant administrative heat rate limit of 25 degrees F per hour until the vacuum breaker setpoint issue was resolved, and the startup plans were evaluated. Plant Engineering reviewed the Sequence of Events Printer and verified operation of all twelve vacuum breakers. The Plant Engineering Department also investigated the drywell vacuum breaker actuation and discovered that the valves are set to open at 35 ft-lbs torque as required by Dresden Maintenance procedure (DMP) 1601-1, Torus Vacuum Breaker Valve Maintenance. Plant Engineer Department issued a letter which correlated the torque settings to a valve opening dp. The torque setting correlated to a opening dp of 0.15 PSID. The drywell vacuum breakers opened at 35 ft-lbs plus or minus 4 ft-lbs.

The letter was reviewed and approved, and the administrative heatup rate was removed.

C. CAUSE OF EVENT:

This event is being issued pursuant to 10CFR50.73 (a)(2)(iv) - any event that results in automatic or manual actuation of any Engineered Safety Feature (ESF).

The cause of the event was due to training and procedure deficiencies. The Technical Specifications (TS) require the Torus to Drywell Vacuum Breakers to open fully with the applied force at all valve positions not exceeding the equivalent to 0.5 psi acting on the Torus face of the valve disk. The Operations Department was aware of the TS requirement but was not aware of the actual valve field setpoint in ft-lbs torque. The section of DOP 1600-01, which provides the method to relieve containment pressure, did not contain a warning that the vacuum breakers may open at the field setpoint of 35 ft-lbs, 0.15 psi, therefore the operators did not expect the vacuum breakers to open.

Dresden Mechanical Surveillance (DMS) 1600-03, Torus To Drywell And Torus To Reactor Building Vacuum Breaker Valve Surveillance, requires the drywell to torus vacuum breaker torque to be set at 35 ft-lbs. Dresden Operating Surveillance (DOS) 1600-9, Pressure Suppression Chamber to Drywell Vacuum Breaker Full Stroke Exercise Test, requires the vacuum breakers to open at less than 58 ft-lbs torque. The procedures do not convert the ft-lbs torque value to an equivalent differential pressure. Because no procedure directly states the opening range for the Drywell Vacuum or the Torus Vacuum breaker, the operators expect the vacuum breakers to open when the DOS 1600-09 limit of 58 ft-lbs, 0.25 psid, is approached.

D. SAFETY ANALYSIS:

After a design basis accident, the drywell vacuum relief valves [BF] open under differential pressure (dp) to allow gas to be drawn from the torus. The torus valves open under dp to allow air to be drawn in from the reactor building. The TS require the drywell vacuum relief valves to open under 0.5 psi dp. This protects the primary containment from collapse by limiting the design basis external to internal dp. Under normal operating conditions the valves must be closed and leak tight. The safety significance of this event was minimal since the Pressure Suppression to Drywell vacuum Breakers operated at the desired setpoint, which is conservative to the TS requirement of 0.5 psid.

E. CORRECTIVE ACTIONS:

1. Train Operators on the Torus to Drywell and Reactor Building to Torus Vacuum Breaker Setpoints (Station Commitment Number (SCN): 249-180-95-01401).

2. Simulator fidelity for the Torus to Drywell and the Reactor Building to Torus Vacuum Breakers was completed by station work request U06763 and U06777 which adjusted the setpoints for the vacuum breakers. (SCN: 249-180-95-01402).

3. DOP 1600-9 has been changed to warn operators that the Torus to Drywell vacuum breakers may open while performing excess pressure relief of the Drywell and Pressure Suppression chamber.

4. Investigate the basis for the vacuum breaker settings and change DMP 1600-01 and DMS 1600-03 to provide greater operating margin to prevent unnecessary valve operations. DAN 902(3)-4 G-14, DAN 902(3)-4 H-14 and DOS 1600-09 will be revised to include field setpoints. (SCN: 249-180-95-01403).

F. PREVIOUS OCCURRENCES:

Not Applicable.

G. COMPONENT FAILURE DATA:

Not Applicable.