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)

NRC FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Dresden Nuclear Power Station, Unit 3	05000249	1 OF 6

TITLE (4)
Licensee Forced into Noncompliance with Technical Specification 3.9.D to Complete Diesel Generator Operability Run Due to Work Management Process 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
07	15	96	96	-- 009 --	01	11	08	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)		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, NARC 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)
Ralph M. 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)

While in a forced outage with the reactor in the Cold Shutdown (CS) mode the requirements of Technical Specification 3.9.D for maintaining one operable Emergency Diesel Generator (EDG) in the CS Mode was not met for four hours during the performance of the monthly Unit 3 EDG operability surveillance. Because of planned corrective maintenance the Safety Related 4Kv Bus 33-1 was removed from service until 7/15/96. On 7/15/96, DOS 6600-01, "Unit 3 Diesel Generator Monthly Operability Surveillance" reached its critical date for test performance and the 2/3 EDG remained unavailable to support the testing. During the performance of the testing there were no operable EDGs available as required by TS. The cause of the event was Managerial Deficiency in the implementation of the work control process. Corrective actions include enhancements to the station work control programs. The safety significance of the event was determined to be minimal. This supplement is submitted to document the additional actions taken to correct the inadequacies which resulted in an ineffective work management process and additional corrective actions.

EVENT IDENTIFICATION:

Licensee forced into Technical Specification Action Statement to complete Unit 3 Diesel Generator Operability Run due to Work Management Process deficiency.

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 3 Event Date: July 15, 1996 Event Time: 1730

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

Reactor Coolant System Pressure: 0 psig

B. DESCRIPTION OF EVENT:

This report is 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. Specifically, the requirements of maintaining one operable Diesel Generator in the Cold Shutdown Mode was not met for four hours on 07/15/96 during the performance of the monthly Diesel Generator operability surveillance. The subject Technical Specification Noncompliance was preceded with safety related 4Kv breaker materiel condition problems which were identified on 6/11/96.

At 0910 on 6/10/96, during a Unit 3 reactor startup with reactor pressure achieving 150 psig, the Operating Team entered the planned Technical Specification (TS) LCO 3.5.C.2.a for the High Pressure Coolant Injection (HPCI) system, until such time as they could complete the HPCI Operability surveillance. At 2208, The Nuclear Station Operator (NSO)[Licensed Reactor Operator] prepared for the upcoming HPCI testing by aligning the Low Pressure Coolant Injection (LPCI) system to the Torus Cooling mode of operation, in accordance with DOP 1500-02, "Torus Water Cooling Mode of LPCI System". The 3A LPCI pump was started in ECCS Division I.

At 0600 on 6/11/96, the NSO performed DOS 2300-03, "HPCI System Operability Verification", successfully completing the operability run of the HPCI system. At 0719, the Operating Team exited the HPCI TS planned LCO. At 1051, an NSO attempted to secure the LPCI pumps from the Torus Cooling mode of operation and found that the 3A LPCI pump would not respond to a trip signal from the Control Room control switch, continuing to run after the switch had been placed in the Normal-after-Trip position. The 3A LPCI pump was successfully secured by placing the pump control switch in the Pull to Lock position for approximately 10 seconds. The Operating Team entered TS LCO 3.5.A.4 and 3.5.A.8, placing Unit 3 into a 24 hour shutdown. Engineering was contacted to investigate the cause of the LPCI pump breaker failing to open on signal from the Main Control Room.

On 6/11/96, Investigation found the presence of hardened grease in the 3A LPCI pump breaker which made the Trip Latch Roller unreliable and caused the breaker not to open upon demand. The 3A LPCI pump breaker was subsequently repaired, and successfully cycled in the breaker test rack at 1615 on 6/11/96. Operational Analysis Department (OAD) performed logic testing on the 3A LPCI pump breaker control logic, with no deficiencies noted. Operations performed a post-maintenance test by successfully starting and stopping the 3A LPCI pump from the Control Room at 2232. At 2319 on 6/11/96, the 3A LPCI pump and Containment Cooling subsystem TS LCO's were exited, removing Unit 3 from the 24 hour shutdown LCO.

On 6/19/96, after the root cause of the breaker failing to open was determined, Engineering was concerned that a potential for common mode failure in the safety related 4Kv breakers existed, resulting in four spare breakers being inspected. It was identified that two of the four breakers had a similar hardened grease condition. A decision was then made to shutdown Unit 3 to perform corrective maintenance on similar breakers on 4Kv Emergency Busses 33-1 and 34-1. Reactor shutdown commenced on Unit 3 at 0430 on 6/20/96 and the unit entered Cold Shutdown at 1315 on 6/21/96.

Safety Related 4Kv Bus 33-1 was removed from service at 0633 on 6/23/96 to begin inspections and corrective maintenance to breakers. This resulted in the Unit 2/3 Diesel Generator being declared inoperable to Unit 3 until the 4Kv bus could be returned to service and subsequent testing of the 2/3 Diesel Generator output breaker at bus 33-1 could be performed. Requirements of TS 3.9.D was met during the maintenance activity as long as the Unit 3 Diesel Generator remained operable to supply Low Pressure injection pumps.

In order to properly and conservatively address the 4Kv breakers issues, Dresden elected to perform much of the 4Kv bus maintenance scheduled for the upcoming refueling outage during the forced outage. During corrective maintenance and subsequent testing of the safety related 4Kv breakers on bus 33-1, some of the breakers failed to meet the acceptance criteria established by the station, causing the length of the bus 33-1 outage to increase.

Work Planning and Operations monitored the progress of the safety related 4Kv breaker work on bus 33-1, fully aware of the future need to complete the scheduled Unit 3 Diesel Generator operability surveillance, as required by the Technical Specifications. The bus 33-1 outage duration continued to lengthen as a result of expanded work scope, Contractor refurbishment of breaker components exceeding their scheduled time interval, in conjunction with some breakers failing to pass the station's post maintenance testing acceptance criteria. As the surveillance due date approached, a conscious decision was made to utilize the allowable time extension and defer the performance of the required Unit 3 Diesel Generator testing.

On 7/15/96, DOS 6600-01, "Unit 3 Diesel Generator Monthly Operability surveillance" reached its critical date (TS surveillance interval plus time extension) for test performance. Failure to complete the testing would cause the Unit 3 Diesel Generator to be inoperable, in addition to the already inoperable 2/3 Diesel Generator, caused by the bus 33-1 outage, resulting in both being inoperable for Unit 3.

On 7/15/96 at approximately 1600 the Regulatory Assurance Supervisor (RAS) [Non Licensed] was notified of the problem. The discussion focused on two options, test the diesel prior to the LCO timeclock expiration or testing it after it expired. The RAS failed to fully recognize the regulatory implications of the situation. When faced with the situation of both diesels inoperative, the RAS should have initiated discussions with the NRC to obtain a Notice Of Enforcement Discretion.

The Operating Team understood that if they elected to perform the surveillance, the Unit 3 Diesel Generator would be declared inoperable during the duration of the surveillance, caused by the procedural requirement to change the diesel droop setting during the diesel start and subsequent loading to prove operability. The Team chose to review the Shutdown Risk to Unit 3, finding that Shutdown Risk would change to "Orange" from "Yellow". They determined the limitations to be placed on unit activities during the Diesel Generator testing, discussed the content of the Heightened Level of Awareness (HLA) briefing (to be held prior to beginning the Diesel Generator surveillance) and implemented contingency measures for during the testing.

At 1801 on 7/15/96, with contingencies in place to assure TS action statement compliance, the Operating Team declared the Unit 3 Diesel Generator inoperable, entering TS 3.9.D, for the duration of the Unit 3 Diesel Generator surveillance testing. The Unit 3 Diesel Generator Operability surveillance was performed and successfully completed. The Diesel Generator was declared operable and requirements of TS 3.9.D was satisfied at 2212.

Review of the regulatory aspects of this event began with Unit 3 into TS 3.9.D which states, "Whenever the reactor is in Cold Shutdown or Refueling modes, a diesel generator shall be operable whenever any work is being done which has the potential to drain the vessel, secondary containment is in effect, or a core or containment cooling system is required." Operations halted all work having the ability to drain the vessel and confirmed that secondary containment was established prior to performance of the Unit 3 Diesel Generator surveillance, but with fuel in the vessel, the operable core cooling systems on bus 34-1 would not have their emergency power source operable during the performance of the diesel generator testing. With this not met, in addition to no action statement provided in the TS's under these conditions, the Operating Team referenced TS 3.0.B for guidance. TS 3.0.B placed Unit 3 with the requirement to achieve hot shutdown within 12 hours, and cold shutdown within the following 24 hours, but TS 3.0.C stated "Specifications 3.0.A and 3.0.B are not applicable in refueling or cold shutdown." Since no specific action statement applied under these conditions, Operations conservatively decided that a Licensee Event Report would be appropriate since TS 3.9.D could not be met.

C. CAUSE OF EVENT:

The primary cause of this event was a Managerial Deficiency (NRC Cause Code E) in the implementation of the work management process. Decisions made to increase work scope combined with the inability to control the work process resulted in the work duration expanding well beyond the originally scheduled task duration.

Contributing causes identified were:

1. Dresden elected to perform much of the 4Kv bus maintenance scheduled for the upcoming refueling outage during the forced outage. This expanded work scope, in conjunction with some breakers failing to pass the station's acceptance criteria after repair, resulted in the outage duration for bus 33-1 exceeding the Technical Specification thirty day surveillance interval for the Unit 3 Diesel Generator.

2. Personnel error by the Regulatory Assurance Supervisor (NRC Cause Code A) because he failed to recognize that NRC involvement was required. Contributing to this was the fact that the situation was identified to the RAS quite late in the LCO time clock period and there were no established expectations for the Operations Team to communicate to the RAS that NRC NOED involvement was needed. There was no method to ensure adequate time for preparation of discretionary enforcement activities was available when the potential exists for exceeding LCO time clocks.

3. Management Deficiency as a result of a inadequacies in the preventative maintenance program for 4Kv breakers and their associated cubicles.

D. SAFETY ANALYSIS:

The Operating Team was challenged with the Unit 3 Diesel Generator becoming inoperable due to the failure to perform the required surveillance or as a result of the performance of the surveillance. The Team requested re-evaluation of Shutdown Risk and decided to perform the surveillance. Shutdown Risk addressed the limitations to be placed on work in progress, surveillances, reactor parameters and directed positive controls for Secondary Containment during surveillance performance as required by TS 3.9.D. Contingencies were discussed, an HLA briefing was performed, and personnel pre-staged prior to beginning the operability run. The reactor was maintained in the Shutdown mode, normal offsite power was available and the alternate ECCS power feed was available throughout the event, resulting in the safety significance being minimal.

E. CORRECTIVE ACTIONS:

E.1 Corrective actions relating to the inadequacies in the breaker preventive maintenance program were transmitted to the NRC as the response to violations included in NRC Inspection report 50-237/96002 (J. S. Perry letter 96-0112, "Amendment to Dresden Nuclear Power Stations Units 2 and 3 Response to Notice of Violation; Inspection Report 50-237/96002"). Corrective actions cited in the violation response included enhancements to the preventive maintenance program and three corrective actions (2371009600214, 2371009600215, 2371009600216) directly related to the 3A LPCI breaker failure on 6/11/96.

E.2 Dresden Station implemented a work stoppage on 7/29/96, during which discussions were held between all levels of the station work force. This interim measure focused on teamwork, schedule adherence, safety (personnel and nuclear), and control of maintenance activities.

E.3 The additional actions taken to correct the inadequacies which resulted in an ineffective work management process (NTS#:249180960090OS1) are as follows:

1. Predefine activities such as Emergency Diesel Generator Surveillances will be scheduled based on frequency, type, and scope to be placed on a "fixed schedule" instead of a "slip schedule". (NTS#:249180960090lS1)

2. More attention has been given to the accuracy of the Operations schedule via assignment of an Operations Discipline Scheduler responsible for development of the Operations schedule. Two Work Execution Center Supervisors have been assigned the responsibility of Operations schedule execution.

3. The importance of adherence to scheduled completion dates is emphasized with Maintenance Lead Supervisors and Work Execution Center Supervisors via daily accountability to the Work Week Manager and weekly accountability to the Maintenance Superintendent.

E.4 Operations Department Policy 1, "Entering LCO's For Preventive Maintenance and Corrective Maintenance" has been revised to require Regulatory Assurance Manager notification when the potential exists to exceed an LCO.

E.5 The RAS recognizes and acknowledges his error and has reviewed this report.

F. PREVIOUS OCCURRENCES:

LER/Docket Number	Title
None	

G. COMPONENT FAILURE DATA:

None