

**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 3 DOCKET NUMBER (2) 05000249 PAGE (3) 1 OF 4

TITLE (4) Loss of Power to Bus 34 Resulted in Auto-Start of Unit 3 Emergency Diesel Generator Due lack of preventive maintenance on Bus Pots.

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
03	25	94	94	-- 011 --	01	12	31	97	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)								
		20.402(b)		20.405(c)	X	50.73(a)(2)(iv)		73.71(b)		
POWER LEVEL (10)	000	20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)		
		20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		OTHER		
		20.405(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		(Specify in Abstract below and in Text, NRC Form 366A)		
		20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)				
		20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)				

LICENSEE CONTACT FOR THIS LER (12)  
 NAME: D. Spencer - Plant Engineering Ext. 3292  
 TELEPHONE NUMBER (Include Area Code): (815) 942-2920

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)										
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS

SUPPLEMENTAL REPORT EXPECTED (14)  
 YES (If yes, complete EXPECTED SUBMISSION DATE). X NO  
 EXPECTED SUBMISSION DATE (15)  
 MONTH DAY YEAR

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

At 2355 on March 25, 1994, multiple alarms were received on panels 903-8, 903-5, 902-4, 923-2, 923-5, and many of the lights on the Unit 3 side of the Control Room went off. This caused a Unit 3 Half Scram, Standby Gas Treatment (SBGT) auto-start and auto-start of Unit 3 Emergency Diesel Generator (EDG) which closed onto bus 34-1. Bus 34 indicated a low voltage condition (via panel meters and white bus energized light out) with the feed breaker from Transformer (TR) 32 to Bus 34 indicating closed. The loss of power to Bus 34 was caused by corrosion buildup on the Bus Pots due to lack of preventive maintenance. A continuing program of preventive maintenance on the Bus Pots has been implemented.

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

was de-energized. TR 32 UV relays are set to actuate at a higher voltage than the Bus 34 UV relays and with a smaller time delay. No TR 32 UV targets nor alarms were received, no other Bus experienced UV conditions and they were all fed from the same source. This would indicate that voltage at TR 32 was within acceptable limits. The only other way to drop out the Bus 34 UV relays would be to disturb power from the Bus Pots to the relaying scheme.

The Bus Pots were thoroughly cleaned and ohm readings brought back within acceptable limits. All stabs were realigned.

It is this combination of factors that substantiates the fact that the Bus Pots lost good contact and caused the Bus Undervoltage condition. The Bus Pots were removed during the Bus outage and the stabs were inspected and cleaned. High resistance readings were indicated at the stab connections. This was anticipated as removing and inspecting the Bus Pots allowed re-energization of Bus 34 from TR 32 during the initial recovery from the event. This is further substantiated by the fact that a TJM history search indicates no record of Bus Pot cleaning and previous cubicle inspections indicate that the Bus and Cubicles were generally in an unpolished state.

C. CAUSE OF EVENT:

This report is being submitted in accordance with 10CFR50.73(a)(2)(iv) which requires the reporting of any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature.

Root cause of the event is corrosion buildup on the Bus Pot stabs in Bus 34 due to lack of preventive maintenance.

D. SAFETY ANALYSIS:

The safety significance of the event during normal shutdown operations is minimal. The loss of power to Bus 34 sent auto-start signals to the Emergency Diesel Generator logic. The Unit 3 Emergency Diesel Generator started properly and assumed the proper loads when challenged by the actuation of the undervoltage relays.

Because Bus 35 and ties from 35 to 36 or 35 to 37 could not be closed until jumpers were installed, the Unit 3 Half-Scram could not be reset and SBTG could not be secured. This resulted in normal Reactor Building Ventilation System unavailability for a period of time. Emergency systems functioned as expected.

E. CORRECTIVE ACTIONS:

All Unit 2 and Unit 3 Bus Pot stabs and cubicals were inspected, cleaned, and contact stabs lubricated during their respective D2R14 and D3R13 outages. A review of maintenance history did not identify any unusual conditions with the Bus Pots during these inspections. (Complete)

Electrical Maintenance procedure DES 6700-11, 4 kV Potential Transformer Inspection, was developed to provide instruction for the cleaning and inspection of potential transformers located in 4 kV switchgear auxiliary cubicals. (Complete)

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Since the issuance of the initial LER, a Performance Centered Maintenance review was completed. Based on industry PM practices for 4 kV breakers and cubicals, it was concluded that the original PM frequency as stated in the initial LER was overly conservative. Consequently, it has been determined that a more appropriate PM schedule would be necessary to support plant operations and outage activities. While this decision does allow a more cost-effective management of plant resources, it is believed that the change in PM frequency does not adversely impact the ability of the associated equipment to perform as required. Currently, our Work Control Program establishes a 4 kV breaker PM frequency of every third refueling outage. However, we are continuing to evaluate this frequency based on industry efforts regarding breaker maintenance. The frequency of the cleaning and inspection activities will continue to be performed in accordance with the station's Work Control Program. (Complete)

EMD revised procedures DEP 7300-09 and DEP 7300-10 to place the Bus Jumpers at locations that allow tie breakers to be operated even if a feed breaker is removed. (Complete)

F. PREVIOUS OCCURRENCES:

<u>LER/Docket Number</u>	<u>Title</u>
93-012	Inadvertent Auto Start of 2/3 Diesel Generator Due to Mechanical Failure. C/A: The affected breaker was repaired and testing was successful.
92-033	Inadvertent Auto Start of 2/3 Diesel Generator Due to cubicle door slam. C/A: Include in HVO training syllabus caution to the sensitivity of the relays in question. Post warning signs on cabinet doors. Tailgate current cabinet door situation to all operators. Fixed cabinet doors so that excessive force or special techniques are not required to properly close the doors.

G. COMPONENT FAILURE DATA:

<u>Manufacturer</u>	<u>Nomenclature</u>	<u>Model Number</u>	<u>Mfg. Part Number</u>
Not Applicable			