



**Commonwealth Edison**  
Dresden Nuclear Power Station  
6500 North Dresden Road  
Morris, Illinois 60450  
Telephone 815/942-2920

June 3, 1994

GFSLTR 94-0176

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

Licensee Event Report 94-011, Docket 50-237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10CFR50.73(a)(2)(iv).

Sincerely,

Gary F. Spedl  
Station Manager  
Dresden Station

GFS/JJV:cfq

Enclosure

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

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FACILITY NAME (1) Dresden Nuclear Power Station, Units 2 and 3 DOCKET NUMBER (2) 05000237 PAGE (3) 1 OF 4

TITLE (4) Auto-start of 2/3 Emergency Diesel Generator Due to Operator Error.

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
05	04	94	94	-- 011 --	0	06	03	94	Dresden 3	05000249
									FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9) N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)									
	20.2201(b)	20.2203(a)(3)(i)	50.73(a)(2)(iii)	73.71(b)						
POWER LEVEL (10) 010	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: J. J. Viney, Operations Staff Ext. 3526 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 NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

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 0908 on May 04, 1994, while performing 4kV breaker checks on Bus 33 per a Special Procedure (Modification Test for Bus 33 Breakers and Stationary Switch Replacement), Bus 33 and Bus 33-1 were inadvertently de-energized. The 2/3 Emergency Diesel Generator (EDG)[EK] auto-started and closed onto Bus 33-1.

As part of the Special Procedure, the Nuclear Station Operator (NSO) was switching the Bus 33 feed from Transformer TR-31 (Unit Aux Transformer) to TR-32 (Reserve Aux Transformer). The NSO closed in the feed breaker from TR-32, but failed to notice that the breaker immediately went to its trip-free condition. The NSO then opened the feed breaker from TR-31, de-energizing Bus 33, which caused the Unit 2/3 EDG to start on Bus 33-1 undervoltage. The Unit 2/3 EDG started normally, closed-in to Bus 33-1, and was loaded and run for approximately 20 minutes. Power to Bus 33 was then restored from TR-31, and the Unit 2/3 EDG was secured.

The feed breaker from TR-32 went to its trip-free position because the TR-32 undervoltage relays had not been reset from a previous test.

**LICENSEE EVENT REPORT (LER)**  
**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 (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 2/3	DOCKET NUMBER (2) 05000237	LER NUMBER (6)		PAGE (3) 2 OF 4
		YEAR 94	SEQUENTIAL NUMBER -- 011 --	

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

**EVENT IDENTIFICATION:**

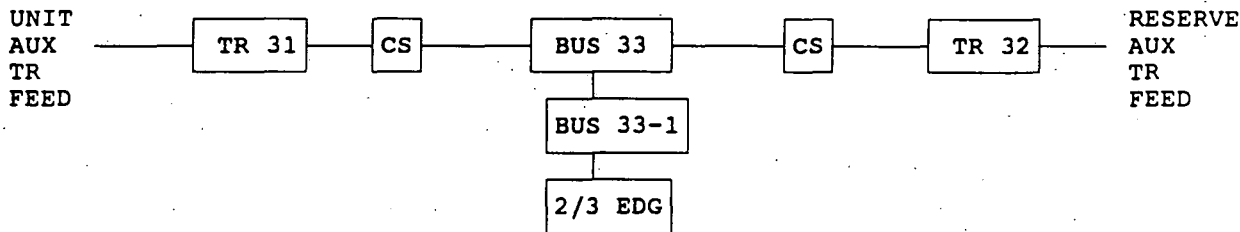
Auto-start of 2/3 Emergency Diesel Generator Due to Operator Error.

**A. PLANT CONDITIONS PRIOR TO EVENT:**

Unit: 2 (3)                                      Event Date: 05/04/94                                      Event Time: 0908  
 Reactor Mode: N (N)                                      Mode Name: Run (Refuel)                                      Power Level: 010 (0)  
 Reactor Coolant System Pressure: 920 psig (0)

**B. DESCRIPTION OF EVENT:**

At 0908 on May 04, 1994, while performing 4Kv breaker checks on Bus 33 per a Special Procedure, Bus 33 and Bus 33-1 were inadvertently de-energized and the Unit 2/3 EDG auto-started and closed onto Bus 33-1. Bus 33 and Bus 33-1 were being fed from TR 31 feed breaker. The procedure steps being performed were meant to parallel feeds from TR 31 and TR 32 feed breakers across Bus 33 and then open the TR 31 feed breaker. (See sketch below)



The Operator had his hands on both TR 31 and TR 32 feed breaker control switches (CS) and was observing the Bus 33 amp meter. The Operator went to close on the breaker control switch for TR 32 and did not see any load picked up from the breaker closure. The Operator then realized that he should not see any load picked up because he had just verified all normal loads on the Bus were de-energized as part of the procedure he was performing. The Trip Free condition of TR 32 feed breaker to Bus 33 was not noticed by the Operator. The Shift Control Room Engineer (SCRE) observing the evolution noticed the Trip Free condition of TR 32 feed breaker but the Operator had operated the TR 31 feed breaker control switch before he could be warned.

Operators are taught not to rely on single indication but observing meter indication is stressed over breaker indication as this is the most accurate means of verifying breaker closure. The reason for opening the TR 31 feed breaker control switch in a timely manner is to reduce the possibility of the breaker tripping on an overcurrent condition due to circulating currents generated by phase mismatch of parallel power sources. An Annunciator alarm "Bus 33 Main and Res Bkr In Parallel" was expected to occur during the time both TR 31 and TR 32 feed breakers were closed. The Operator observing the Bus 33 Amp meters heard an alarm, "4Kv Main Feed Bkr Trip", signifying the breaker going to the Trip Free condition, he did not verify this was his expected alarm, "Bus 33 Main and Res Bkr In Parallel", and opened TR 31 feed breaker. The

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 (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)		DOCKET NUMBER (2)	LER NUMBER (6)		PAGE (3)
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

opening of TR 31 feed breaker de-energized of Bus 33 and Bus 33-1. The Unit 2/3 EDG auto-started and energized Bus 33-1. The Unit 2/3 EDG functioned properly and was loaded and ran for approximately 20 minutes, Bus 33 power was then transferred to TR 31 and the Unit 2/3 EDG was secured.

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.

The reason for TR 32 feed breaker to Bus 33 Trip Free condition was discovered to be a deficiency in a procedure that had been performed previously. This procedure did not include a step to reset the TR 32 UV devices. An Annunciator alarm from the UV devices "Res Aux TR 32 Undervoltage" was locked in but it did not cause the Operators to realize the TR 32 UV relays had not been reset. The opening of TR 31 feed to Bus 33 while TR 32 feed to Bus 33 was in a Trip Free condition is attributable to Operator error.

D. SAFETY ANALYSIS:

The safety significance of this event is considered minimal. The loss of power to Bus 33 sent auto-start signals to the Emergency Diesel Generator logic. The Unit 2/3 Emergency Diesel Generator started as designed and properly closed onto Bus 33-1, loads were added to allow proper design conditions. The Unit 2/3 EDG was run loaded for approximately 20 minutes to allow proper temperature conditions and then secured.

E. CORRECTIVE ACTIONS:

A Shift Engineers Review Board (SERB) was convened and the event and possible consequences was discussed with the individual involved.

The event was tailgated to all operation crews and training was notified of the event to stress self-check and attention to detail when performing Special Procedures. The author of the Special Procedure was also notified.

A letter detailing the event has been placed on the operation crews bulletin board written by the individual involved concerning a self assessment of his actions during the event.

F. PREVIOUS OCCURRENCES:

LER/Docket Number	Title
94-011	Loss of Power to Bus 34 Resulted in Auto-Start of Unit 3 Emergency Diesel Generator Due lack of preventive maintenance on Bus Pots.

Bus Pots were cleaned and inspected. Bus Pot cleaning will be performed every other refuel outage.

**LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION**

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

93-012

Inadvertent Auto Start of 2/3 Diesel Generator Due to Mechanical Failure.

The affected breaker was repaired and testing was successful.

92-033

Inadvertent Auto Start of 2/3 Diesel Generator Due to cubicle door slam.

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:

Not Applicable

**EVENT SUMMARY  
 AND  
 CAUSE CODES**

LER NUMBER

12-2-94-011

<input type="checkbox"/>	Lost generation
<input type="checkbox"/>	Cost > \$25,000
<input type="checkbox"/>	Hazard or Spill
<input type="checkbox"/>	Personnel injury

<input type="checkbox"/>	Reactor trip
<input checked="" type="checkbox"/>	ESF actuation
<input checked="" type="checkbox"/>	NRC reportable
<input checked="" type="checkbox"/>	LER
<input type="checkbox"/>	PSE

<input type="checkbox"/>	NRC violation, level	_____
<input type="checkbox"/>	GSEP event, class	_____
<input type="checkbox"/>	Tech Spec LCO	_____
<input type="checkbox"/>	Potential or future loss	_____
<input type="checkbox"/>	SALP functional area	_____

Component Type				Failure mode							
X											
X											
X											

Licensed? L or blank				Type			
Level		Department		Detail Code			
A	L	W	O			I	3
A							
A							

Type				Detail Code				Department			
B											
B											
B											

Type				Detail Code			
C							

Type of Deficiency				Detail Code				Procedure Type			
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Type				Detail Code				Department			
E											
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