



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

October 05, 1993

GFSLTR 93-0091

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

License Event Report 93-017, Docket 050237, is being submitted as  
required by Technical Specification 6.6, NUREG 1022 and 10 CFR  
50.73 (a) (2) (i) (B).

*Gary F. Spedl for 10-5-93*

Gary F. Spedl  
Station Manager  
Dresden Station

GFS\slb

Enclosure

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

130008

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Dresden Nuclear Power Station, Unit 2				Docket Number (2) 0 5 0 0 0 2 3 7				Page (3) 1 of 0 4			
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Title (4)  
UNUSUAL EVENT NOT DECLARED IN JULY FROM BOTH UNIT 2 AND UNIT 2/3 DIESEL GENERATORS BEING INOPERABLE DUE TO PERSONNEL ERROR

Event Date (5) Month: 0   Day: 9   Year: 0893			LER Number (6) Year: 93   Sequential Number: 017   Revision Number: 00				Report Date (7) Month: 10   Day: 08   Year: 93			Other Facilities Involved (8) Facility Names: N/A   Docket Number(s): N/A			
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OPERATING MODE (9): N  
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)

POWER LEVEL (10) 0 9 0	20.402(b)	20.405(a)(1)(i)	20.405(a)(1)(ii)	20.405(a)(1)(iii)	20.405(a)(1)(iv)	20.405(a)(1)(v)	20.406(c)	50.36(c)(1)	50.36(c)(2)	50.73(a)(2)(i)	50.73(a)(2)(ii)	50.73(a)(2)(iii)	50.73(a)(2)(iv)	50.73(a)(2)(v)	50.73(a)(2)(vii)	50.73(a)(2)(viii) (A)	50.73(a)(2)(viii) (B)	50.73(a)(2)(ix)	73.71(b)	73.71(c)	Other (Specify in Abstract below and in Text)
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LICENSEE CONTACT FOR THIS LER (12)

NAME J.J. Viney						TELEPHONE NUMBER Ext. 3526					
AREA CODE 8 1 5						9 4 2 - 2 9 2 0					

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): X  
Yes (If yes, complete EXPECTED SUBMISSION DATE) | NO

Expected Submission Date (15): Month: 1 | Day: 2 | Year: 2 1 9 3

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

On four occasions during the time periods of 1625 to 2053 on 7/6/93, between 1415 to 1419 on 7/7/93, between 0523 to 0604 and again between 1152 to 1200 on 7/17/93, it was not recognized that when the feed breaker from Bus 29 to Motor Control Centers (MCC) 29-2 and 29-4 was open that both the Unit 2 and Unit 2/3 Emergency Diesel Generators (EDG) were inoperable and therefore unusual events should have been declared per BWR Emergency Action Levels (EALs) 3.e. The Unit 2 EDG was correctly considered inoperable due to loss of power to its cooling water pump as fed from MCC 29-2. The Unit 2/3 EDG was not considered inoperable per Dresden Operating Annunciator Procedure (DAN) DG 2/3 B (C2) (C3) because of a loss of power to its Circulating Lube Oil pumps that are fed from MCC 29-4. This was in error. The DAN that administratively declares the EDGs inoperable states the EDG may be used in an emergency. Since the 2/3 EDG could be used and Control Room personnel knew why the oil pumps were lost (due to loss of the MCC), the 2/3 EDG was not declared inoperable. A review of this event is being conducted by the Site Engineering Construction (SEC) group to determine if procedure revisions or possible plant modifications are required.

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TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]

**PLANT AND SYSTEM IDENTIFICATION:**

General Electric-Boiling Water Reactor-2527 Mwt rated core thermal power.

Nuclear Tracking System (NTS) tracking code numbers are identified in the text as (XXX-XXX-XX-XXXXX)

**EVENT IDENTIFICATION:**

UNUSUAL EVENT NOT DECLARED IN JULY FROM BOTH UNIT 2 AND 2/3 DIESEL GENERATORS BEING INOPERABLE AT THE SAME TIME DUE TO PERSONNEL ERROR.

**A. CONDITIONS PRIOR TO EVENT:**

Unit: 2

Event Dates :  
On 7/6/93  
On 7/7/93  
On 7/17/93

Event Times:  
Between 1625 and 2053  
Between 1415 and 1419  
Between 0523 and 0604 and  
again between 1152 and 1200

Reactor Mode: Power Operation

Mode Name: N

Power Level: 90

Reactor Coolant System Pressure: 1000 psig

**B. DESCRIPTION OF EVENT:**

During four occasions from the periods between 1625 to 2053 on 7/6/93, between 1415 to 1419 on 7/7/93, between 0523 to 0604 and again between 1152 to 1200 on 7/17/93, it was not recognized that when the feed breaker from Bus 29 to MCC 29-2 and MCC 29-4 [EA] was open that both the Unit 2 and Unit 2/3 Emergency Diesel Generators (EDG) [EK] were inoperable and therefore unusual events should have been declared per EAL 3.e.

Trip of the feed breaker from bus 29 to MCC 29-2 and MCC 29-4 on 7/6/93 is discussed in LER 93-008 and the cause of the breaker trip is unknown and still under investigation. Trip of the feed breaker from bus 29 to MCC 29-2 and MCC 29-4 on 7/7/93 was a planned event to replace the feed breaker. Trip of the feed breaker from bus 29 to MCC 29-2 and MCC 29-4 on 7/17/93 was a second occurrence of the breaker trip due to an unknown condition. This trip is also included in LER 93-008.

MCC 29-2 supplies power to the cooling water pump [LB] of the Unit 2 EDG and it was recognized that the Unit 2 EDG was inoperable. MCC 29-4 supplies power to the Unit 2/3 EDG Circulating Lube Oil Pump [LA] and the Turbocharger Lube Oil Pump which ensure prelube to the engine and turbocharger. Although the 2/3 EDG trouble annunciator did alarm, it was not acknowledged by personnel in the Control Room that the 2/3 EDG was administratively inoperable per DAN DG 2/3 B (C2) (C3). Both DANs have "Caution" statements that state loss of the Circulating Lube Oil Pump or loss of the Turbo Charger Lube Oil Pump will result in possible loss of immersion heaters and will cause loss of lubrication to the turbo charger bearings. In conclusion, both caution statements declare the Diesel Generator may be used for emergency conditions. However, the step after the caution statements in both DANs contain the words "declare the Diesel Generator inoperable".

The Updated Final Safety Analysis Report (UFSAR) explains the Diesel Generator Lube Oil System upgrade as a system to provide a continuous lube oil supply to engine and turbocharger bearings during engine standby and,

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consequently, to reduce cumulative bearing damage due to lack of prelube. GM-EMD standard operating manual recommended prelubrication of the engines prior to any start which follows a shutdown period of 48 hours or more. Surveillance procedures did not include any provision for prelubrication prior to the modification. The UFSAR also states "The lube oil system modification has no effect on the start and load rate capability, overall capacity, or operability status of the diesel generator units as outlined in the Technical Specifications".

**C. APPARENT CAUSE OF EVENT:**

This report is being 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.

Although Operations personnel were aware of the loss of the Circulating Lube Oil Pump and loss of the Turbo Charger Lube Oil Pump due to MCC 29-4 being deenergized, they did not consider the 2/3 EDG as being inoperable. Based on past experience and practices, the wording of both DAN procedures and the USFAR, the 2/3 EDG was judged as being degraded but still operable with a high degree of reliability. This was inappropriate action on the part of the Control Room personnel in not complying with the DAN requirements. It was not realized at the time that the administratively inoperable 2/3 EDG constituted an Unusual Event and that proper notifications should have been made.

**D. SAFETY ANALYSIS OF EVENT:**

The safety significance is considered minimal. The pre-lube system is designed to provide a continuous supply of warm oil circulating to the Turbocharger and bearings in the Engine. This helps to reduce effects of rapid acceleration and prolong life and reliability of the Engine. In the event that the prelube system is lost, the EDG is still available to autostart and carry the required loads. Furthermore, the manufacturer implies that a loss of the prelube system would present a concern after 48 hours of inactivity. The prelube system was unavailable for a maximum of 5 hours during any one of the events and was restored immediately thereafter.

**E. CORRECTIVE ACTIONS:**

The proper agencies were notified.

Personnel involved were counselled by management on procedure adherence expectations.

This event has been included in the training program.

SEC is evaluating this condition with the following objectives.

1. If the EDG's are indeed inoperable when the Circulating Lube Oil Pump and the Turbocharger Lube Oil Pump are not available, then a design change is required to change the source of power to the pumps of the 2/3 EDG. (NTS # 237-180-93-01701)
2. SEC to evaluate when the Circulating Lube Oil Pump and the Turbocharger Lube Oil Pump are not available if immediately starting the affected EDG and letting it run unloaded until the oil pumps can be restored is a viable option. (NTS # 237-180-93-01702)

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3. A supplement to this LER will be written to state what the results of the SEC evaluations were. (NTS #237-180-93-01703)

F. PREVIOUS OCCURRENCES:

A Database search failed to find any applicable previous occurrences although one event was recognized as not being the correct EAL.

<u>LER/Docket Number</u>	<u>Title</u>
NTS # 2371009202004	Failure to declare an unusual event per criteria of either EAL No. 8.e. or 9.a.

G. COMPONENT FAILURE DATA:

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