

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)  
McGuire Nuclear Station, Unit 1DOCKET NUMBER (2)  
0 5 0 0 0 3 6 9PAGE (3)  
1 OF 0 2TITLE (4)  
Diesel Generator 1B started due to a transmission system disturbanceEVENT DATE (5)  
MONTH DAY YEAR  
0 3 2 8 8 4 8 4  
LER NUMBER (6)  
YEAR SEQUENTIAL NUMBER REVISION NUMBER  
8 4 0 1 0 0 0  
REPORT DATE (7)  
MONTH DAY YEAR  
0 4 2 7 8 4  
OTHER FACILITIES INVOLVED (8)  
FACILITY NAMES  
DOCKET NUMBER(S)  
0 5 0 0 0 0  
0 5 0 0 0 0OPERATING MODE (9)  
6  
POWER LEVEL (10)  
0 0 0  
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)  
20.402(b) ☒ 20.405(a) ☒ 50.73(a)(2)(iv) ☐ 73.71(b) ☐  
20.405(a)(1)(i) ☐ 50.36(a)(1) ☐ 50.73(a)(2)(v) ☐ 73.71(c) ☐  
20.405(a)(1)(ii) ☐ 50.36(a)(2) ☐ 50.73(a)(2)(vii) ☐ OTHER (Specify in Abstract below and in Text, NRC Form 366A) ☐  
20.405(a)(1)(iii) ☐ 50.73(a)(2)(i) ☐ 50.73(a)(2)(viii)(A) ☐  
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)(ix) ☐LICENSEE CONTACT FOR THIS LER (12)  
NAME  
Phillip B. Nardoci, Licensing Engineer  
TELEPHONE NUMBER  
AREA CODE  
7 0 4 3 7 3 7 4 3 2COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)  
CAUSE SYSTEM COMPONENT MANUFAC. REPORTABLE TO NRC  
TURER  
CAUSE SYSTEM COMPONENT MANUFAC. REPORTABLE TO NRC  
TURERSUPPLEMENTAL REPORT EXPECTED (14)  
YES (If yes, complete EXPECTED SUBMISSION DATE) ☐ NO ☒  
EXPECTED SUBMISSION DATE (15)  
MONTH DAY YEAR

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

Diesel Generator (D/G) 1B experienced an invalid automatic start on March 28, 1984 at 1725. The D/G started on a Unit 1 blackout signal generated by a momentary power transmission system disturbance due to a severe storm. (D/G 1A was inoperable due to maintenance.)

Unit 1 was in a refueling outage with all fuel removed from the reactor at the time of this occurrence. This incident is attributed to an Unusual Service Condition, due to the power distribution system disturbance caused by the severe weather. This event is similar to previous LER 369/84-06.

The blackout signal cleared in less than 1 second, therefore the D/G was not loaded. The D/G was shutdown after operating for approximately six minutes. The D/G performed as designed during this incident.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
McGuire Nuclear Station, Unit 1	0500036984	0	10	0	0	2	OF 02

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

Diesel Generator (D/G) [EIIS:GEN] 1B experienced an invalid automatic start on March 28, 1984 at 1725. The D/G started on a Unit 1 blackout signal generated by a momentary power transmissions system [EIIS:EF] disturbance due to a severe storm. (D/G 1A was inoperable due to maintenance.)

Unit 1 was in a refueling outage with all fuel removed from the reactor at the time of this occurrence. This incident is attributed to an Unusual Service Condition, due to the power distribution system disturbance caused by the severe weather. This event is similar to previous LER 369/84-06.

The D/Gs ensure that sufficient power will be available to supply the safety-related equipment for the safe shutdown of the facility. The D/Gs also supply power for the mitigation and control of accident conditions within the facility. Therefore, in the event of a loss of offsite power or a blackout, the D/Gs will automatically start and subsequently load.

The blackout signal was generated (at 1725) by an undervoltage condition on Unit 1 4160 volt essential switchgear due to line voltage fluctuations when a severe storm passed through the Duke System. The D/G started when the load sequencer [EIIS:JE] received signals from two out of three 4160 volt, instantaneous, undervoltage relays [EIIS:RLY]. The nominal setpoint of the undervoltage relays is 3500 volts. Unit 1 was being supplied by offsite power so that 4160 volt essential switchgear were sensitive to system fluctuations.

The load sequencer has an eight second time delay after starting the D/G before beginning a load shed and subsequent reloading of the D/G. The time delay confirms the validity of the blackout signal. The blackout signal cleared after 0.083 seconds; therefore, D/G 1B was not loaded. D/G 1B was shutdown after operating for approximately six minutes.

The D/G performed as designed during this incident and would have subsequently loaded had this been a valid blackout. The health and safety of the public were not affected by this incident.

**DUKE POWER COMPANY**

P.O. BOX 33189

CHARLOTTE, N.C. 28242

HAL B. TUCKER

VICE PRESIDENT  
NUCLEAR PRODUCTION

April 27, 1984

TELEPHONE  
(704) 373-4531

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

Subject: McGuire Nuclear Station, Unit 1  
Docket No. 50-369  
LER 369/84-10

Gentlemen:

Pursuant to 10 CFR 50.73 Sections (a)(1) and (d), attached is Licensee Event Report 369/84-10 concerning an automatic start of diesel generator 1B due to a transmission system disturbance which is submitted in accordance with §50.73 (a)(2)(iv). Initial notification of this event was made (pursuant to §50.72 Section (b)(2)(ii)) with the NRC Operations Center via the ENS on March 28, 1984. This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,

*H. B. Tucker*

Hal B. Tucker

PBN:glb

Attachment

cc: Mr. James P. O'Reilly  
Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Mr. W. T. Orders  
NRC Resident Inspector  
McGuire Nuclear Station

Records Center  
Institute of Nuclear Power Operations  
1100 Circle 75 Parkway, Suite 1500  
Atlanta, Georgia 30339

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11