

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) LaSalle County Station Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 7 4	PAGE (3) 1 OF 0 3
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TITLE (4)
Reactor Scram

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 NAMES		DOCKET NUMBER(S)
0 8	1 7	8 4	8 4	0 5 2	0 0	0 9	1 1	8 4			0 5 0 0 0
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THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50. (Check one or more of the following) (11)

OPERATING MODE (9) 1	20.402(b)	20.406(a)	<input checked="" type="checkbox"/>	90.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 0 5 2	20.406(a)(1)(i)	90.36(a)(1)		90.73(a)(2)(v)	73.71(a)
	20.406(a)(1)(ii)	90.36(a)(2)		90.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)
	20.406(a)(1)(iii)	90.73(a)(2)(i)		90.73(a)(2)(vii)(A)	
	20.406(a)(1)(iv)	90.73(a)(2)(ii)		90.73(a)(2)(vii)(B)	
	20.406(a)(1)(v)	90.73(a)(2)(iii)		90.73(a)(2)(viii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME Robert D. Koenig, extension 499	TELEPHONE NUMBER AREA CODE: 8 1 5 3 1 5 1 7 1 - 6 1 7 6 1 1
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
X	T/L	EXC	Q 0 8 4	N					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (16)	MONTH	DAY	YEAR

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

On August 17, 1984, at 0845 hours, while Unit 2 was at 52% power, the Unit 2 turbine received a trip signal. This immediately produced a Unit 2 reactor scram.

Upon investigation it was discovered that the "A" phase of the alternator - exciter stator windings had developed a turn-to-turn fault. This turn-to-turn fault produced a voltage imbalance in the three phase "Y" network. This imbalance was immediately detected by the phase fault detector, resulting in a trip of the Unit 2 turbine. The alternator - exciter (EXC) was replaced and the unit was put back into service on August 30, 1984.

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TEXT of more space is required, use additional NRC Form 2884's (17)

I. EVENT DESCRIPTION

On August 17, 1984, at 0845 hours, while Unit 2 was at 52% power, the Unit 2 Main Turbine (TA) received a trip signal. This action immediately produced a Unit 2 Reactor Scram (JC). All plant systems required to operate during the event performed their function as expected.

II. CAUSE

Upon investigation it was discovered that the Unit 2 alternator-exciter "phase-fault" detector (TL) had been activated. When this trip card activated, the alternator-exciter field breaker was automatically opened. This resulted in a trip of the generator (TB), leading to a Main Turbine trip and a reactor scram.

Upon investigation it was discovered that the "A" phase of the alternator-exciter stator windings had developed a turn-to-turn fault. This turn-to-turn fault produced a voltage imbalance in the three-phase "Y" network. This imbalance was immediately detected by the phase fault detector, resulting in an alarm, and the opening of the exciter field breaker.

With the field breaker opened, the Unit 2 turbine tripped producing a scram of the reactor.

III. PROBABLE CONSEQUENCES OF THE OCCURRENCE

The consequences of this event were minimal. If the phase fault detector had not activated, the stator overcurrent device would have tripped the exciter, protecting the turbine-generator. If the unit had been operating at any power up to 100%, the event that occurred would have produced a similar effect.

IV. CORRECTIVE ACTION

The phase fault detector circuit board in the Unit 2 alternator-exciter control circuit was replaced with a new board. (The old board was tested and found to be in operational condition.) This was to assure that no problems did exist in the phase fault circuit.

Since a turn-to-turn fault did occur in the stator windings of the alternator-exciter it was necessary to replace the alternator with a new one. The new alternator was tested and found to operate correctly. Unit 2 was returned to service on 8/30/84.

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TEXT (if more space is required, use additional NRC Form 385A's) (17)

V. PREVIOUS OCCURRENCES

No previous occurrences of this nature have occurred before at LaSalle.

VI. NAME AND TELEPHONE NUMBER OF PREPARER

R. D. Koenig, 815/357-6761, extension 499.



Commonwealth Edison
LaSalle County Nuclear Station
Rural Route #1, Box 220
Marseilles, Illinois 61341
Telephone 815/357-6761

September 11, 1984

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

Dear Sir:

Reportable Occurrence Report #84-052-00, Docket #050-374 is being submitted to your office in accordance with 10CFR 50.73.

CE Dargent

for
G. J. Diederich
Superintendent
LaSalle County Station

GJD/MLD/kg

Enclosure

xc: NRC, Regional Director
INPO - Records Center
File/NRC

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