NRC Form 366 (6-89) | U.S. NUCLEAR REGULATORY COMMISSION | Approved OMB No. 3150-0104 Expires 4/30/92

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
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TITLE (4) Reactor Trip as a Result of an Inadvertent Trip of the Exciter Field Breaker

EVENT DAY (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 2	1 8	9 3	9 3	0 0 3	0 0	0 3	1 8	9 3		0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following)(11)			
POWER LEVEL (10)	1 0 0	20.402(b)	20.405(c)	XX 50.73(a)(2)(iv)	73.71(b)
		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 (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)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (AREA CODE)
J. W. Proffitt, Compliance Licensing	6 1 5 8 4 3 - 6 6 5 1

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

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

On February 18, 1993, at 1336 Eastern standard time, with Unit 1 operating at approximately 100 percent power, a reactor trip occurred as a result of the exciter field breaker opening. The breaker opened when a senior reactor operator training instructor inadvertently actuated the trip latch on the exciter field breaker during a training exercise. The unit responded as expected following the trip and the Operations crew stabilized the unit in hot standby conditions. The reactor trip occurred as a result of the instructor failing to evaluate the risks and consequences associated with conducting training activities using operating plant components. Training on energized and/or sensitive equipment has been stopped until a policy on utilizing energized and/or sensitive equipment is established. An interim policy on opening cabinets for energized equipment has been developed and communicated to site employees. Additionally, appropriate disciplinary action has been taken.

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

I. PLANT CONDITIONS

Unit 1 was in power operation at approximately 100 percent reactor thermal power.

II. DESCRIPTION OF EVENT

A. Event

On February 18, 1993, at 1336 Eastern standard time (EST), a turbine trip followed by a reactor trip occurred as a result of the main generator exciter field breaker (EIIS Code TB) opening. The breaker opened when a senior reactor operator (SRO) training instructor inadvertently actuated the trip latch on the exciter field breaker during a training exercise. The unit responded as expected following the trip and the Operations crew stabilized the unit in hot standby conditions.

B. Inoperable Structures, Components, or Systems That Contributed to the Event

None.

C. Dates and Approximate Time of Major Occurrences

1. February 18, 1993 — An SRO instructor was conducting training on electrical equipment for assistant unit operators (AUOs).

2. February 18, 1993 at 1330 EST — The SRO instructor requested that one of the AUOs contact the main control room (MCR) unit operator/reactor operator and ask if they could look at the exciter field breaker. The AUO received permission from the MCR, and the instructor opened the field breaker door. After shining his flashlight into the cabinet, he started explaining how the breaker was latched when in both the test and connect position.

3. February 18, 1993 at 1336 EST — While talking about the trip latch and pointing to it at the same time, he moved the latch down slightly. This caused the interlock trip latch to open the Unit 1 main generator exciter field breaker.

4. February 18, 1993 at 1336 EST — The turbine tripped on an electrical relay protection signal and resulted in a subsequent reactor trip.

5. February 18, 1993 at 1351 EST — The unit was stabilized in Mode 3.

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

E. Method of Discovery

The trip was discovered during routine observations of plant parameters by MCR Operations personnel.

F. Operator Actions

When the trip occurred, the MCR operators immediately used emergency procedures to diagnose the event and mitigate consequences. The unit was stabilized in accordance with procedures.

G. Safety System Responses

As designed, the reactor tripped following the turbine trip. Safety systems performed as designed.

III. CAUSE OF EVENT

A. Immediate Cause

The turbine/reactor tripped as a result of an inadvertent trip of the exciter field breaker.

B. Root Cause

The turbine/reactor trip occurred as a result of the instructor failing to evaluate the risks and consequences associated with conducting training activities using operating plant components. Also, there is no formal plant policy for evaluating the risks and consequences associated with performing activities using operating plant components.

C. Contributing Factors

The control room unit operator/reactor operator did not specifically instruct or provide guidance regarding the potential risks associated with the breaker located inside the cabinet to the AUO requesting permission to enter the cabinet.

IV. ANALYSIS OF EVENT

Plant equipment required to operate after the reactor tripped performed as expected, and plant parameters were within expected ranges. However, the steam generator power-operated relief valves did lift as a result of the loss of condenser circulating water. There were no challenges to the safety analysis requirements. Therefore, the event did not adversely affect the health and safety of plant personnel or the public.

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

V. CORRECTIVE ACTION

A. Immediate Corrective Actions

After the reactor tripped, the MCR staff responded as prescribed by emergency procedures. They promptly diagnosed the plant conditions and took actions necessary to stabilize the unit in a safe condition.

Training on energized and/or sensitive equipment has been stopped until a policy on energized and/or sensitive equipment is established.

An interim policy on opening cabinets for energized equipment has been developed and communicated to site employees.

B. Corrective Actions to Prevent Recurrence

1. A plant policy on activities associated with sensitive equipment will be established.

2. Appropriate disciplinary action has been taken.

VI. ADDITIONAL INFORMATION

A. Failed Components

None.

B. Previous Similar Events

A review of previously reported events identified nine events (LERs 327/86025, 327/86041, 327/85023, 327/84055, 327/87060, 327/89013, 327/90002, 327/91011, and 328/92011) where it appears that the risk associated with the activity being performed was not properly evaluated. Each of the events involved activities associated with sensitive equipment or being performed near sensitive equipment. The following are examples of the above events: (1) passing equipment up and down a ladder next to a breaker associated with safety-related equipment with the opposite train of equipment inoperable, (2) allowing a radio inside containment during power operation, (3) use of the wrong tool inside an energized compartment, and (4) performance of an inspection activity that required minor component manipulation on energized equipment. The corrective actions for the events were directed toward the type of activity being performed; therefore, the corrective actions could not have prevented this event.

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

C. Commitments

1. A plant policy on activities associated with sensitive equipment will be established by June 7, 1993.

COMMITMENT TRACKING LOAD SHEET

X NEW COMMITMENT) Enter Control No.
___ CHANGE TO EXISTING COMMITMENT) to be changed or
___ ADDITION OF NEW COMMITMENT) added to

Does this commitment modify or supersede a previous commitment? ___ YES X NO
If yes, identify commitment. ______________________

ITEM NO. NCO ITEM TYPE* BI PLANT* S

COMMITMENT DESCRIPTION* (500 Characters Max.)
A plant policy on activities associated with sensitive equipment, ~~including sensitivity to system load~~, will be established by ~~July 9, 1993.~~ June 7, 1993 jwp 3/16/93

TRACKING* ORG/GRP/SUPV (SITE LIC)	RESPONSIBLE* ORG/GRP/SUPV (LEAD COORDINATOR)	INITIATING* ORG/GRP/SUPV (IMPLEMENTING ORG)
SCL/PCS/RRT/JWP	SQO/PMO/~~RJB~~ mas	SQO/PMO/RJB

UNIT* 0 SYSTEM(S)* ______
NRC REFERENCE* 93003 327
KEYWORDS* Implement Policy

P/2 Node No. ______ IDENT (A/C)* C PRIORITY DUE DATE* 07/09/93
ADMIN DUE DATE 07/02/93

STATUS* ______ MILESTONE PRIORITY ______

Commitment to be linked to TROI Item Number ______

REMARKS: ______

DOC/REFERENCE CORRESPONDENCE* (Primary First, Additional Following)
RAF to NRC

Cost Information: Level of Effort ___ Minor ___ Major ___ (If minor or major, complete page 2 of 2.)

[signature] 3-16-93 — IMPLEMENTING ORGANIZATION / DATE
[signature] 3-16-93 — LEAD COORDINATOR / DATE

COMPUTER INPUT COMPLETE ______ (Initials) ______ (Date)

COMPUTER INPUT CHECKED ______ (Initials) ______ (Date)

*Fields That Must Be Completed As A Minimum.