



Entergy Nuclear Operations, Inc.  
Palisades Nuclear Plant  
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Tel 269 764 2000

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July 21, 2008

10 CFR 50.73(a)(2)(iv)(A)

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Palisades Nuclear Plant  
Docket 50-255  
License No. DPR-20

Licensee Event Report 08-003, Reactor Protection System and Auxiliary Feedwater System Actuation

Dear Sir or Madam:

Licensee Event Report (LER) 08-003 is enclosed. The LER describes an automatic actuation of the reactor protection system and the auxiliary feedwater system. The occurrence is reportable in accordance with 10 CFR 50.73(a)(2)(iv)(A).

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.

A handwritten signature in black ink, appearing to read "C. Schwarz".

Christopher J. Schwarz  
Site Vice President  
Palisades Nuclear Plant

Enclosure (1)

CC Administrator, Region III, USNRC  
Project Manager, Palisades, USNRC  
Resident Inspector, Palisades, USNRC

**ENCLOSURE 1**

**LER 08- 003**

**Reactor Protection System and Auxiliary Feedwater System Actuation**

2 Pages Follow

# LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

Estimated burden per response to comply with this mandatory information collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

<b>1. FACILITY NAME</b> PALISADES NUCLEAR PLANT	<b>2. DOCKET NUMBER</b> 05000255	<b>3. PAGE</b> 1 OF 2
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**4. TITLE**  
Reactor Protection System and Auxiliary Feedwater System Actuation

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
05	23	2008	2008	003	00	07	21	2008	FACILITY NAME	DOCKET NUMBER

<b>9. OPERATING MODE</b>  1	<b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §:</b> (Check all that apply)											
	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
<b>10. POWER LEVEL</b>  100	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

**12. LICENSEE CONTACT FOR THIS LER**

FACILITY NAME Laurie Lahti	TELEPHONE NUMBER (Include Area Code) (269) 764-2788
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**13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT**

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
X	EL	87	W120	Y					

<b>14. SUPPLEMENTAL REPORT EXPECTED</b> <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	<b>15. EXPECTED SUBMISSION DATE</b>	MONTH	DAY	YEAR
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**ABSTRACT** (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On May 23, 2008, at 1249 hours, with the plant in Mode 1 at 100% power, an actuation of the 346 generator negative sequence relay caused an actuation of the 386C coastdown lockout relay. The 386C relay actuation caused the main generator output breakers in the switchyard to open, causing a turbine trip, which actuated the reactor protective system to trip the reactor. As expected, the auxiliary feedwater system started automatically to recover steam generator level.

The cause of the generator negative sequence relay could not immediately be determined. The relay spuriously failed.

The relay was replaced and sent to Asea Brown Boveri (ABB) for analysis. The problem could not be reproduced at ABB.

The event is reportable in accordance with 10 CFR 50.73(a)(2)(iv)(A) as an event that resulted in an actuation of both the reactor protection system and the auxiliary feedwater system.

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

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
PALISADES NUCLEAR PLANT	05000255	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 2
		2008	- 001	- 00	

### EVENT DESCRIPTION

On May 23, 2008, at 1249 hours, with the plant in Mode 1 at 100% power, an actuation of the 346 negative sequence generator relay [87;EL] caused an actuation of the 386C coastdown lockout relay [86;EL]. The 386C relay actuation caused the main generator output breakers [BKR;FK] in the switchyard to open, causing a turbine [TRB;EL] trip, which actuated the reactor protective system [JC] to trip the reactor [RCT;AB]. As expected, the auxiliary feedwater system [BA] started automatically to recover steam generator [SG;AB] level.

There were no inoperable structures, systems, or components at the start of this event that contributed to the event. The normal heat sink (main condenser) remained available.

The event is reportable in accordance with 10 CFR 50.73(a)(2)(iv)(A) as an event that resulted in an actuation of both the reactor protection system and the auxiliary feedwater system.

### CAUSE OF THE EVENT

The cause of the generator negative sequence relay actuation could not immediately be determined. The relay spuriously failed.

### CORRECTIVE ACTIONS

The relay was replaced and sent to ABB for analysis. The problem could not be reproduced at ABB.

The relay 346 current transformer circuitry and associated wiring will be inspected for degradation during a future outage.

### SAFETY SIGNIFICANCE

The event is considered to be of very low safety significance. All safety systems functioned as expected.

### PREVIOUS SIMILAR EVENTS

None