

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
OYSTER CREEK, UNIT 1

DOCKET NUMBER (2)

0 5 0 0 0

PAGE (3)

1 OF 0 3

TITLE (4)
REACTOR LOW-LOW WATER LEVEL SENSOR CALIBRATION, PROCEDURAL DEFICIENCY

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)														
1	0	2	7	8	4	8	4	—	0	2	4	—	0	0	1	1	3	0	8	4	0	5	0	0	0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10)	0 0 0	20.402(b)	20.406(a)	50.73(a)(2)(iv)	73.71(b)						
		20.406(a)(1)(i)	50.36(a)(1)	50.73(a)(2)(v)	73.71(a)						
		20.406(a)(1)(ii)	50.36(a)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)						
		20.406(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)							
		20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)							
		20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)							

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Nicholas Ertle, Engineer Associate III	AREA CODE 6 1 0 9 9 7 1 1 - 4 7 1 9

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

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input checked="" type="checkbox"/>	<input type="checkbox"/>				

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

With the plant shutdown in the REFUEL mode, one of two switches associated with RE02C (reactor low-low water level sensor) failed to trip at the setpoint required by the procedure. Engineering review determined that, by the method utilized during the functional test, it was possible to trip only one of the two switches in the RE02 sensors. The procedure measures the setpoint of only one switch in each sensor. The other switch was not calibrated, although it was verified to perform the required trip function. Subsequently, the core spray instrumentation channel test procedure was revised and executed to properly test and calibrate the four (4) RE02 sensors and each of their two (2) switches.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

FACILITY NAME (1) OYSTER CREEK, UNIT I	DOCKET NUMBER (2) 0 5 0 0 0 2 1 9 8 4 - 0 2 4 - 0 0 0 2 OF 0 3	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

TEXT (If more space is required, use additional NRC Form 388A's) (17)

DATE OF OCCURRENCE

The date of occurrence was October 27, 1984 at approximately 2020 hours.

IDENTIFICATION OF OCCURRENCE

The reactor low-low water level sensors were inadequately surveilled. This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B).

CONDITIONS PRIOR TO OCCURRENCE

The plant was shutdown in the REFUEL mode in preparation for startup.

DESCRIPTION OF OCCURRENCE

During execution of procedure No. 619.3.004, "Reactor Low-Low Water Level Functional Test" level switch/indicator RE02C failed to perform its intended function at the prescribed setpoint.

The functional test method for inducing the low-low level trips directed the technician to remove the Yarway (RE02) indicator cover plate and physically position the mechanical indicator downscale to read approximately 86 inches above top of active fuel. Each RE02 instrument has two (2) internal switches: an AC switch which actuates the Reactor Protection System isolation functions and a DC switch which actuates core spray. Dependent on the switches' trip point separation, within each level sensor (RE02) a technician could, by this method, position the mechanical indicator and trip only one (1) switch. The adjustment for both the switches on RE02 sensors are separate and it is practically impossible to calibrate both the switches to actuate at the exact same setting. Therefore, one switch actuates before the other one.

This deficiency was detected as a result of a temporary change revision to the functional test procedure that added a clarification to "hold" the mechanical indicator in place after positioning it to induce the low-low level trip. Before this, technicians would position the mechanical indicator further downscale after an alarm was initiated. This ensured that the tripped condition stayed "in" while other personnel were verifying various associated trip functions.

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					OF	

TEXT (If more space is required, use additional NRC Form 305A's) (17)

APPARENT CAUSE OF OCCURRENCE

Procedural deficiencies in the "Core Spray System Instrument Channel Calibration and Test" (Procedure No. 610.3.005) and "Reactor Low-Low Water Level Functional Test" (Procedure No. 619.3.004), did not provide for the proper calibration and verification of both trip functions performed by the Yarway (RE02) sensors.

SAFETY ASSESSMENT

Since each switch in the RE02 instruments was not individually tested for setpoint, there was a potential for one of the two switches to exceed the Technical Specification setpoint without being detected during surveillance. Because of the design, however, it is not likely that the two switches would be more than a few inches of reactor water level apart. When retested without prior adjustment, all switches were found to trip within the Technical Specification limits.

CORRECTIVE ACTION

The "Core Spray System Instrument Channel Calibration and Test" Procedure No. 610.3.005 was temporarily revised to properly calibrate reactor low-low water level sensors RE02 A, B, C and D and record "as found" and "as left" data. Permanent revisions to plant procedures for the proper calibration of reactor low-low water level sensor (RE02) AC and DC switch trips have been initiated. A revision to the functional test procedure will also require delta pressure input to the switches to verify actuation, rather than holding the pointer manually to trip the switch..



GPU Nuclear Corporation

Post Office Box 388
Route 9 South
Forked River, New Jersey 08731-0388
609 971-4000
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November 30, 1984

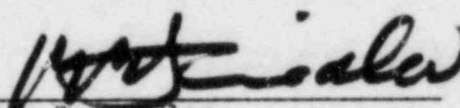
U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Licensee Event Report

This letter forwards one (1) copy of Licensee Event Report (LER)
No. 84-024.

Very truly yours,


Peter B. Friedler
Vice President and Director
Oyster Creek

PBF:dam
Enclosures

cc: Dr. Thomas E. Murley, Administrator
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

NRC Resident Inspector
Oyster Creek Nuclear Generating Station
Forked River, NJ 08731

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