

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
OYSTER CREEK, UNIT 1DOCKET NUMBER (2)
0 5 0 0 0 2 1 1 9 1 OF 0 1 3TITLE (4)
CORE SPRAY AND DIESEL GENERATOR INITIATION CAUSED BY 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)
0 4	0 7	8 6	8 6	0 0 5	0 0 0 5	0 6	8 6				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 8 5		20.402(b)		20.406(e)	X	50.73(a)(2)(iv)		73.71(b)			
		20.406(c)(1)(i)		50.36(e)(1)		50.73(a)(2)(v)		73.71(e)			
		20.406(a)(1)(ii)		50.36(e)(2)		50.73(a)(2)(vii)		OTHER (Specify in Abstract below and in Text, NRC Form 366A)			
		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
Lynne W. Leitman, Operations EngineerTELEPHONE NUMBER
AREA CODE
6 0 9 9 7 1 - 4 3 8 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

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

An inadvertent Core Spray System and Emergency Diesel Generator automatic initiation occurred on April 7, 1986 at 1429 hours during a surveillance of reactor low water level scram sensors while the plant was operating at 1650 Mwt. The event occurred when a step in the test procedure was performed requiring valving one of the low level sensors, RE05/19A1, into service after being connected to a test gauge to verify communication of the sensor with the reactor. The test gauge and line were not filled with water and caused a pressure drop in the common sensing line shared by reactor low-low level sensor RE02A when RE05/19A1 was valved into service. The pressure drop caused RE02A to sense low-low reactor water level and Core Spray System operation was initiated. After approximately one minute, Core Spray System operation was terminated. Other plant systems responded as required to the event, and safety significance is considered minimal. The apparent cause of the occurrence was an inadequate procedure that did not specify that the test gauge had to be filled and vented before valving the low level sensor into service. Immediate corrective actions were taken to ensure the plant was in a safe condition and the surveillance procedure was revised before completion of testing. Long term corrective action planned is training of instrument technicians to fill lines before valving instruments into service.

8605130049 860506
PDR ADOCK 05000219
S PDR

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		
Oyster Creek, Unit 1	0 5 0 0 0 2 1 9	8 6	— 0 0 5	— 0 0	0 2	OF 0 3

TEXT (If more space is required, use additional NRC Form 365A's) (17)

DATE OF OCCURRENCE

The event occurred on April 7, 1986 at approximately 1429 hours.

IDENTIFICATION OF OCCURRENCE

The Core Spray System and Emergency Diesel Generators were automatically initiated during a surveillance of reactor low water level sensors. This event is considered reportable under 10CFR50.73(a)(2)(iv).

CONDITIONS PRIOR TO OCCURRENCE

The plant was operating at 1650 MWt in the RUN mode.

DESCRIPTION OF OCCURRENCE

On April 7, 1986, a routine low reactor water level scram sensor test and calibration (Procedure 619.3.013) was in progress. A step in the procedure was reached requiring sensor RE05/19A1 to be valved into service after being connected to a test gauge to verify communication of the sensor with the reactor. The test gauge and line, which are unique to this surveillance, were not required by the procedure to be filled prior to their connection to the sensor. When RE05/19A1's isolation valves were opened a pressure drop occurred in the sensing lines as the test lines filled (1/4" outer diameter thick wall stainless steel tubing approximately 12 inches long). This pressure drop caused the reactor low-low level sensor, RE02A, which shares the same variable leg sensing line to sense low-low reactor water level when level was actually normal (See attached sketch for sensing line configuration). RE02A tripped its relay in the Reactor Protection System (RPS) and both Core Spray systems and the Emergency Diesel Generators initiated at 1429 hours. After approximately one second, RE02A and its associated RPS relay reset. Control Room operators verified proper reactor water level on two independent instruments and turned off the Core Spray pumps after approximately one minute of operation, at 1430 hours. Both diesel generators ran for the required 11.5 minutes after idle start and automatically shut off. The Containment Isolation, Standby Gas Treatment and Reactor Isolation systems were checked for proper operation and were found not to have tripped spuriously. Reactor water level, pressure and power did not change throughout the event. The surveillance was terminated and sensor RE05/19A1 was valved back into service.

APPARENT CAUSE OF OCCURRENCE

The apparent cause of the occurrence has been attributed to an inadequate procedure. The surveillance procedure being used did not provide instructions to the user to fill the test gauge line attached to the reactor low water level

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 9/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Oyster Creek, Unit 1	050002119	86	— 005	— 000	3	OF	03

TEXT (If more space is required, use additional NRC Form 365A's) (17)

sensor before valving the sensor into service. When the sensor was valved into service with the unfilled test gauge and line, the pressure drop caused by filling the lines caused the reactor low-low level sensor sharing RE05/19A1's sensing line to trip and initiate Core Spray.

ANALYSIS OF OCCURRENCE & SAFETY ASSESSMENT

Several protective functions are actuated when reactor water level drops below 7'2" (low-low level) above the core. These are: Core Spray initiation; primary and secondary containment isolation; recirculation pump trip; reactor isolation; Emergency Diesel Generator initiation; and Isolation Condenser initiation. Of these, only Core Spray and Emergency Diesel Generator initiated because its initiation logic requires only one low-low reactor water level signal unlike the other protective functions listed above which have a one out of two twice logic for initiation.

If this incident had occurred with reactor pressure less than 300 psig, actual Core Spray injection would have taken place. In this case, Core Spray initiated properly on a low-low level signal sensed by RE02A and other systems including the Emergency Diesel Generators, Containment Isolation, Standby Gas Treatment, and Reactor Isolation systems responded as required. Under the conditions, at the time of occurrence, this event represents only an unnecessary challenge to the Core Spray system and Emergency Diesel Generators. Therefore, the safety significance of this event is considered minimal.

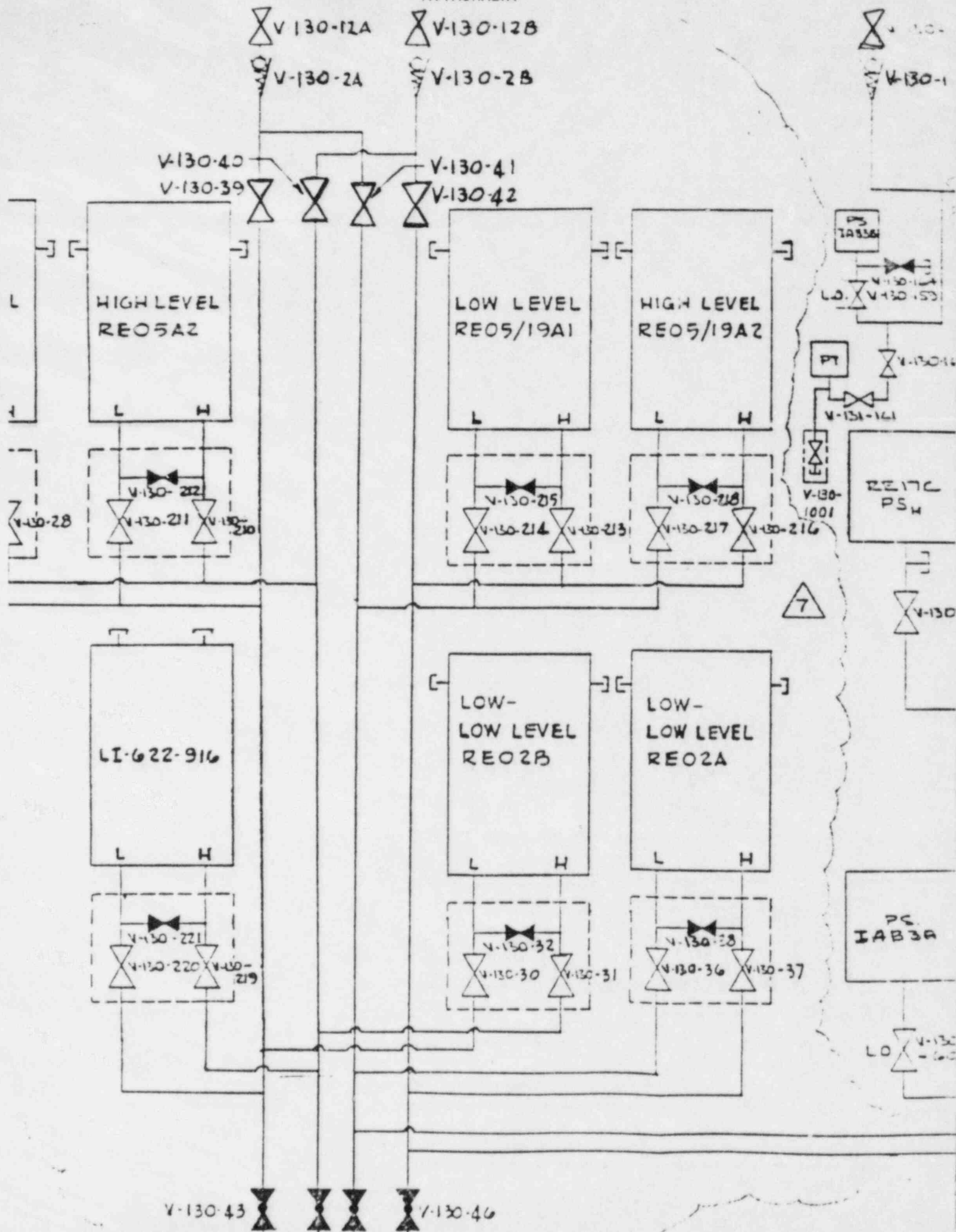
CORRECTIVE ACTIONS

After the Core Spray initiation, immediate corrective actions were taken to ensure the plant was in a safe condition and Core Spray operation was terminated. The Post Trip Review Group was convened to analyze the event. Prior to the recommencement of the reactor low water level sensor test and calibration, the procedure was revised to ensure all test gauges and test lines are full of water prior to valving sensors back into service.

Long term corrective action will consist of instruction on the proper technique for filling lines before valving instruments into service and will be included in Instrumentation & Controls Technician training.

dam:0180A

ATTACHMENT





GPU Nuclear Corporation

Post Office Box 388
Route 9 South
Forked River, New Jersey 08731-0388
609 971-4000
Writer's Direct Dial Number:

May 6, 1986

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. 86-005.

Very truly yours,

Peter B. Fiedler
Vice President and Director
Oyster Creek

PBF:BH:dam(0180A)
Enclosures

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

Mr. Jack N. Donohew, Jr.
U.S. Nuclear Regulatory Commission
7920 Norfolk Avenue, Phillips Bldg.
Bethesda, MD 20014
Mail Stop No. 314

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

IF22
1/1