



James P. O'Reilly  
Directorate of Regulatory Operations  
Region I  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Jersey Central Power & Light Company  
Oyster Creek Nuclear Generating Station Docket #50-219  
Forked River, New Jersey 08731

Abnormal Occurrence Report No. 50-219/74/ 26

The following is a preliminary report being submitted  
in compliance with the Technical Specifications  
paragraph 6.6.2.

Preliminary Approval:

J. T. Carroll, Jr. 7/12/74  
Date

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Initial Telephone  
Report Date: 4/12/74

Date of  
Occurrence: 4/12/74

Initial Written  
Report Date: 4/12/74

Time of  
Occurrence: 0855

OYSTER CREEK NUCLEAR GENERATING STATION  
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence  
Report No. 50-219/74/ 26

IDENTIFICATION  
OF OCCURRENCE:

Violation of the Technical Specifications, paragraph N/A,  
Failure of emergency service water pump (52C) to start when  
called upon.

This event is considered to be an abnormal occurrence as de-  
fined in the Technical Specifications, paragraph 1.15D.

CONDITIONS PRIOR  
TO OCCURRENCE:

|                                  |                                       |
|----------------------------------|---------------------------------------|
| <u>X</u> Steady State Power      | <u>      </u> Routine Shutdown        |
| <u>      </u> Hot Standby        | <u>      </u> Operation               |
| <u>      </u> Cold Shutdown      | <u>      </u> Load Changes During "   |
| <u>      </u> Refueling Shutdown | <u>      </u> Routine Power Operation |
| <u>      </u> Routine Startup    | <u>      </u> Other (Specify)         |
| <u>      </u> Operation          | <u>      </u>                         |

Power: Core, 1843 MWt  
Elec., 637 MWe  
Flow: Recirc.,  $61 \times 10^6$  lb/hr  
Feed.,  $6.9 \times 10^6$  lb/hr  
Stack Gas: 36,600  $\mu$ Ci/Sec

DESCRIPTION  
OF OCCURRENCE:

On Friday, April 12, 1974, in attempting a normal start of the  
containment spray system, the following sequence of events  
occurred:

- 1) A start signal given to containment spray system II.
- 2) Containment spray pump 51C started.
- 3) Emergency service water pump 52C failed to start and  
"Emergency Service Water Pump C Failure" alarm initiated  
after the ~180 second time delay.

- 4) Emergency service water pump 52D was then started and operated successfully in accordance with requirements of Technical Specification 3.4.C.4.
- 5) Containment spray system II was secured.
- 6) An operator was dispatched to the 4160V switchgear room and it was discovered that the thermal overload relay had tripped on the 52C breaker. The overload relay was reset.
- 7) Control room operator attempted a restart of containment spray system II.
- 8) The system operated properly with no irregularities.
- 9) The system, after this successful operability, was secured.

The system was given an additional operability check later in the day and operated successfully with no problems or alarms.

Prior to this event on Thursday, April 11, 1974, the containment spray system II was initiated to obtain torus water sample and to pump torus water. At this time, while running the system, the "Emergency Service Water Pump C Trouble" alarm was received. The pump continued operating and an operator was dispatched to the emergency service water pump to investigate. The oil level and the bearing temperatures were normal. However, the operator did not check the thermal overload relay at the pump breaker in the 4160V switchgear room. At this time, it was thought that the alarm was a faulty indication and a job order was issued to have it checked out. When the system was secured, the alarm did not clear. This alarm was still in when the pump start was attempted at the time of the incident.

APPARENT CAUSE  
OF OCCURRENCE:

☐ Design  
☐ Manufacture  
☐ Installation/  
Construction  
☐ Operator

☐ Procedure  
☐ Unusual Service Condition  
☐ Inc. Environmental  
Component Failure  
☐ Other (Specify)  
\_\_\_\_\_

A check of the logic circuit showed that the initial alarm of "Emergency Service Water Pump C Trouble" should not have prevented the pump from starting. The incident is still under investigation and the exact cause yet to be determined.

ANALYSIS OF  
OCCURRENCE:

The containment system is designed to provide heat removal capability with one containment spray and one emergency service water pump in either loop. The safety significance of this event is in the loss of redundancy of the emergency service water pumps in one of the two redundant containment spray systems.

CORRECTIVE  
ACTION:

The corrective action will be determined by the Plant Operations Review Committee after the appropriate review of all the circumstances associated with this event.

FAILURE DATA:

Under investigation.

Prepared by:

*J. S. Sullivan*

Date:

4/12/74

To:

James P. O'Reilly  
Directorate of Regulatory Operations  
Region I  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

From:

Jersey Central Power & Light Company  
Oyster Creek Nuclear Generating Station Docket #50-219  
Forked River, New Jersey 08731

Subject:

Abnormal Occurrence Report No. 50-219/74/26

The following is a preliminary report being submitted  
in compliance with the Technical Specifications  
paragraph 6.6.2.

Preliminary Approval:

*J. T. Carroll, Jr.*  
J. T. Carroll, Jr.

*4/12/74*  
Date

cc: Mr. A. Giambusso

*4/12/74*  
U.S. ATOMIC ENERGY COMMISSION  
DIVISION OF COMPLIANCE

1974 APR 17 AM 9 23

RECEIVED

OYSTER CREEK NUCLEAR GENERATING STATION  
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence  
Report No. 50-219/74/26

IDENTIFICATION  
OF OCCURRENCE:

Violation of the Technical Specifications, paragraph N/A,  
**FAILURE OF EMERGENCY SERVICE WATER PUMP  
(52C) TO START WHEN CALLED UPON.**

This event is considered to be an abnormal occurrence as defined in the Technical Specifications, paragraph 1.15 D.

CONDITIONS PRIOR  
TO OCCURRENCE:

|  |  |
|--|--|
| <input checked="" type="checkbox"/> Steady State Power | <input type="checkbox"/> Routine Shutdown        |
| <input type="checkbox"/> Hot Standby                   | <input type="checkbox"/> Operation               |
| <input type="checkbox"/> Cold Shutdown                 | <input type="checkbox"/> Load Changes During     |
| <input type="checkbox"/> Refueling Shutdown            | <input type="checkbox"/> Routine Power Operation |
| <input type="checkbox"/> Routine Startup               | <input type="checkbox"/> Other (Specify)         |
| <input type="checkbox"/> Operation                     |  |

|           |                            |         |
|-----------|----------------------------|---------|
| POWER     | CORE - 1843.               | MWT     |
|           | ELEC. - 637                | MWE     |
| FLOW      | RECIRC. - $61 \times 10^6$ | g/hr    |
|           | FEEDW. - $6.9 \times 10^6$ | g/hr    |
| STACK GAS | - 36,600                   | MCi/SEC |

DESCRIPTION

OF OCCURRENCE: ON FRIDAY APRIL 12, 1974 IN ATTEMPTING A NORMAL START OF THE CONTAINMENT SPRAY SYSTEM, THE FOLLOWING SEQUENCE OF EVENTS OCCURRED:

- 1) A START SIGNAL GIVEN TO CONTAINMENT SPRAY SYSTEM II
- 2) CONTAINMENT SPRAY PUMP 51C STARTED
- 3) EMERGENCY SERVICE WATER PUMP 52C FAILED TO START AND "EMERG. SERVICE WATER PUMP C FAILURE" ALARM INITIATED AFTER THE 4180 SEC. TIME DELAY.



- 4) EMERGENCY SERVICE WATER PUMP 52D WAS THEN STARTED AND OPERATED SUCCESSFULLY IN ACCORDANCE WITH REQUIREMENTS OF TECHNICAL SPECIFICATIONS 3.4.C.4.
- 5) CONTAINMENT SPRAY SYSTEM II WAS SECURED.
- 6) AN OPERATOR WAS DISPATCHED TO THE 4160 V SWITCHGEAR ROOM AND IT WAS DISCOVERED THAT THE THERMAL OVERLOAD RELAY HAD TRIPPED ON THE 52C BREAKER. THE OVERLOAD RELAY WAS RESET.
- 7) CONTROL ROOM OPERATOR ATTEMPTED A RESTART OF CONTAINMENT SPRAY SYSTEM II
- 8) THE SYSTEM OPERATED PROPERLY WITH NO IRREGULARITIES
- 9) THE SYSTEM AFTER THIS SUCCESSFUL OPERABILITY WAS SECURED

THE SYSTEM WAS GIVEN AN ADDITIONAL OPERABILITY CHECK LATER IN THE DAY AND OPERATED SUCCESSFULLY WITH NO PROBLEMS OR ALARMS.

PRIOR TO THIS EVENT ON THURSDAY APRIL 11, 1974, THE CONTAINMENT SPRAY SYSTEM II WAS INITIATED TO OBTAIN TORUS WATER SAMPLES AND TO PUMP TORUS WATER. AT THIS TIME WHILE RUNNING THE SYSTEM THE "EMER. SERVICE WATER PUMP C TRIP" ALARM WAS RECEIVED. THE PUMP CONTINUED OPERATING AND AN OPERATOR WAS DISPATCHED TO THE EMER. SERV. WATER PUMP. TO INVESTIGATE. THE OIL LEVEL AND THE BEARING TEMPERATURES WERE NORMAL. HOWEVER, THE OPERATOR DID NOT CHECK THE

THERMAL OVERLOAD RELAY AT THE PUMP BREAKER IN THE  
4160 V SWITCHGEAR ROOM. AT THIS TIME IT WAS THOUGHT THAT  
THE ALARM WAS A FAULTY INDICATION AND A JOB ORDER WAS  
ISSUED TO HAVE IT CHECKED OUT. WHEN THE SYSTEM WAS  
SECURED THE ALARM DID NOT CLEAR. THIS ALARM WAS STILL  
ON WHEN THE PUMP<sup>START</sup> WAS ATTEMPTED AT THE TIME OF  
THE INCIDENT.



APPARENT CAUSE  
OF OCCURRENCE:

\_\_\_\_\_ Design  
\_\_\_\_\_ Manufacture  
\_\_\_\_\_ Installation/  
\_\_\_\_\_ Construction  
\_\_\_\_\_ Operator

\_\_\_\_\_ Procedure  
\_\_\_\_\_ Unusual Service Condition  
\_\_\_\_\_ Inc. Environmental  
\_\_\_\_\_ Component Failure  
\_\_\_\_\_ Other (Specify)  
\_\_\_\_\_

A CHECK OF THE LOGIC CIRCUIT SHOWED THAT THE INITIAL ALARM OF "EMERGENCY SERVICE WATER PUMP C TROUBLE" SHOULD NOT HAVE PREVENTED THE PUMP FROM STARTING. THE INCIDENT IS STILL UNDER INVESTIGATION AND THE EXACT CAUSE YET TO BE DETERMINED.

ANALYSIS OF  
OCCURRENCE:

THE CONTAINMENT SYSTEM IS DESIGNED TO PROVIDE HEAT REMOVAL CAPABILITY WITH ONE CONT. SPRAY AND ONE EMERGENCY SERVICE WATER PUMP IN EITHER LOOP. THE SAFETY SIGNIFICANCE OF THIS EVENT IS IN THE LOSS OF REDUNDANCY OF THE EMERGENCY SERVICE WATER PUMPS IN ONE OF THE TWO REDUNDANT CONT. SPRAY SYSTEMS.

CORRECTIVE  
ACTION:

THE CORRECTIVE ACTION WILL BE DETERMINED BY THE POEL AFTER THE APPROPRIATE REVIEW OF ALL THE CIRCUMSTANCES ASSOCIATED WITH THIS EVENT.

FAILURE DATA:

UNDER INVESTIGATION.

Prepared by:

J. S. Salling

Date:

APRIL 12, 1974

PHILADELPHIA ELECTRIC COMPANY  
Peach Bottom Atomic Power Station  
Delta, Pennsylvania  
17314

215-337-1150 X-243

April 11, 1974

*Delivered to Mr. R.A. Feil*

Mr. James P. O'Reilly, Director  
United States Atomic Energy Commission  
Directorate of Regulatory Operations  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Subject: Abnormal Occurrence 24-Hour Notification

Confirming my conversation with Mr. R. A. Feil, A.E.C. Region I  
Regulatory Operations Office on April 11, 1974.

Reference: License Number DPR-4, Amendment Number 1  
Technical Specification Reference 3.5.D.1

Report No.: 50-277-74-20  
Report Date: April 11, 1974  
Occurrence Date: April 10, 1974  
Facility: Peach Bottom Atomic Power Station  
R. D. 1, Delta, Pennsylvania 17314

Identification of Occurrence:

Momentary trip of RCIC Inverter in the Emergency Shutdown Panel.

Conditions Prior to Occurrence:

Reactor was critical at about 75% power.

Description of Occurrence:

During the manual trip of a reactor feedwater turbine, the RCIC inverter located on the emergency shutdown control panel tripped. This condition was annunciated in the control room. The tripped inverter was immediately identified and successfully reset.

Designation of Apparent Cause of Occurrence:

Cause of TOPAZ inverter trippings is still under investigation.

Tripping appears to be associated with possible voltage spikes on the D.C. system.

Analysis of Occurrence:

Since A.C. power from the normal RCIC inverter was never interrupted, the operability of the RCIC system was not affected. Since the tripped inverter could be reset immediately, RCIC operability from the emergency shutdown panel was only out of service for a few minutes.

Corrective Action:

The inverter installed in the emergency shutdown panel is being replaced with a spare unit. The unit which experienced the tripping will be

*DUP of 8403030257*

Failure data;  
some other tripping of the RCI C inverter  
has been reported as AO-50-277-74-14

Very Truly yours  
W. T. Ulrich  
Superintendent  
Bess Bottoms Atomic  
Power Station