

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. 50-219/74/32

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

Preliminary Approval:

J. T. Carroll, Jr. 5/22/74
J. T. Carroll, Jr. Date

cc: Mr. A. Giambusso

U.S. ATOMIC ENERGY COM.
DIVISION OF COMPLIANCE

1974 MAY 20 AM 10:09

RECEIVED

8304080493 740522
PDR ADOCK 05000219
S PDR

Handwritten:
50-219

Initial Telephone

Report Date: 5/22/74

Date of

Occurrence: 5/21/74

Initial Written

Report Date: 5/22/74

Time of

Occurrence: 1100

OYSTER CREEK NUCLEAR GENERATING STATION
FORKED RIVER, NEW JERSEY 0873'

Abnormal Occurrence
Report No. 50-219/74/ 32

IDENTIFICATION
OF OCCURRENCE:

Violation of the Technical Specifications, paragraph N/A.
It was observed that the RV40D core spray booster pump pressure switch failed in the permissive position. This created a condition whereby had core spray booster pump NZ03B failed to start or failed to establish a discharge pressure of 230 psig its associated redundant booster pump, NZ03D, would not have started automatically.

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

CONDITIONS PRIOR
TO OCCURRENCE:

<input 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 checked="" type="checkbox"/> Refueling Shutdown	<input type="checkbox"/> Routine Power Operation
<input type="checkbox"/> Routine Startup	<input type="checkbox"/> Other (Specify)
<input type="checkbox"/> Operation	

Reactor mode switch in REFUEL with the reactor cavity flooded.

DESCRIPTION
OF OCCURRENCE:

While performing the annual surveillance test of the auto-depressurization initiation logic with the System I core spray system disabled, it was observed that a relay, 1K114D in the System II core spray booster pump initiation logic, was in the energized position. An investigation indicated that the System II core spray booster pump discharge pressure switch, RV40D, which actuates this relay was in the closed position. The switch

normally closes when the booster pump discharge pressure comes up to at least 230 psig, thereby energizing the 1K114D relay. Normally closed contacts from the 1K114D relay act in conjunction with the 1K114B relay and RV40B pressure switch to trip the NZ03B booster pump and start the redundant NZ03D booster pump if the pump does not come up to 230 psig after five seconds. Failure of the switch in the closed position created a condition whereby NZ03B would not have tripped if it failed to start or establish sufficient discharge pressure and pump NZ03D would not have started since the logic was failed in the "satisfied" position.

It should be noted that this failure occurred subsequent to the April 12 plant shutdown since auxiliary contacts from this relay actuate an alarm in the station control room which was not observed during power operation. When the plant is in the cold shutdown condition, this alarm is normally on because it is a common alarm for the 285 psig permissive switch, RB17, for the core spray parallel injection valves. Since the reactor was fully depressurized, this switch was closed and the alarm was on.

APPARENT CAUSE
OF OCCURRENCE:

<input type="checkbox"/> Design	<input type="checkbox"/> Procedure
<input type="checkbox"/> Manufacture	<input type="checkbox"/> Unusual Service Condition
<input type="checkbox"/> Installation/	<input type="checkbox"/> Inc. Environmental
<input type="checkbox"/> Construction	<input type="checkbox"/> Component Failure
<input type="checkbox"/> Operator	<input type="checkbox"/> Other (Specify)

The cause of this occurrence is presently under investigation.

ANALYSIS OF
OCCURRENCE:

The safety significance of this event is considered to be minimal since the reactor was in the shutdown condition with the cavity flooded. Had a LOCA occurred in this condition, the System II core spray pumps which operated satisfactorily would have delivered core spray flow at rated capacity but at a lower discharge pressure, assuming the booster pump failed to start.

CORRECTIVE
ACTION:

The 16K114D relay was placed in the deenergized position which is the tripped condition. In this configuration, RV40B would have acted to sense improper booster pump discharge pressure and started the redundant pump.

FAILURE DATA:

MERCOID Pressure Switch
Type DAW43-156 R21E

Prepared by:

Jonathan H. Rine

Date:

5/22/74