



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. 50-219/74/28

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

Preliminary Approval:

J. T. Carroll, Jr. 4/19/74
J. T. Carroll, Jr. Date

cc: Mr. A. Giambusso ✓

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Initial Telephone
Report Date: 4/19/74

Date of
Occurrence: 4/19/74

Initial Written
Report Date: 4/19/74

Time of
Occurrence: 0715

OYSTER CREEK NUCLEAR GENERATING STATION
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence
Report No. 50-219/74/28

IDENTIFICATION
OF OCCURRENCE:

Violation of the Technical Specifications, paragraph 3.4.A.1, which requires the core spray system to be operable at all times with irradiated fuel in the reactor vessel, except as specified in Specification 3.4.A.3 and 3.4.A.4. Suction valve (V-20-4) to the "B" core spray pump was stuck in the closed position for a period of approximately 15 minutes thereby causing a loss of core spray pump redundancy in system II. In addition, core spray system I was tagged out of service for maintenance at this time.

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

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	

The reactor mode switch was in the REFUEL position with reactor coolant temperature approximately 104°F.

DESCRIPTION
OF OCCURRENCE:

At approximately 0715 on April 19, 1974, while performing surveillance testing on core spray system II, motor-operated valve V-20-4 failed to open electrically after having closed electrically in a normal manner. This surveillance testing was being performed

on core spray system II after system I was tagged out of service for maintenance. (Hydraulic shock and sway arrestor units were being replaced on components of system I.) V-20-4 was manually opened approximately 15 minutes after this valve problem was identified.

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 apparent cause of this occurrence has not been identified at this time.

ANALYSIS OF
OCCURRENCE:

Motor-operated valve V-20-4 provides suction to the "B" core spray pump in core spray system II. This valve is normally maintained in the open position but is closed whenever required for isolation purposes. Had core spray system operation been required, the "B" core spray pump would have functioned normally both before performance of the surveillance testing and after the valve was locked in the open position. Only the isolation function of the valve was lost during these two time periods. The safety significance of this event is that for a period of approximately 15 minutes core spray pump redundancy was lost in system II. Since system I was tagged out of service during this time period, a further degradation in core spray system capability resulted.

CORRECTIVE
ACTION:

Immediate corrective action involved manually opening the motor-operated valve (V-20-4) and tagging open the associated circuit breaker to prevent subsequent closing. Additional corrective actions will be determined following the completion of maintenance and review of this incident by the Plant Operations Review Committee.

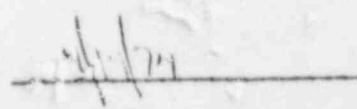
FAILURE DATA:

To be supplied at a later date.

Prepared by:



Date:



OYSTER CREEK NUCLEAR GENERATING STATION
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence
Report No. 50-219/74/28

Report Date

April 26, 1974

Occurrence Date

April 19, 1974

Identification of Occurrence

Violation of the Technical Specifications, paragraph 3.4.A.1, which requires the core spray system to be operable at all times with irradiated fuel in the reactor vessel, except as specified in Specification 3.4.A.3 and 3.4.A.4. Suction valve (V-20-4) to the "B" core spray pump was stuck in the closed position for a period of approximately 15 minutes, thereby causing a loss of core spray pump redundancy in system II. In addition, core spray system I was tagged out of service for maintenance at this time. This event is considered to be an abnormal occurrence as defined in the Technical Specifications, paragraph 1.15B and D.

Conditions Prior to Occurrence

The plant was shut down for refueling.

The reactor mode switch was in the REFUEL position with reactor coolant temperature approximately 104°F.

Description of Occurrence

At approximately 0715 on April 19, 1974, while performing surveillance testing on core spray system II, motor-operated valve V-20-4 failed to open electrically after having closed electrically in the normal manner. This surveillance testing was being performed on core spray system II after system I was tagged out of service for maintenance. (Hydraulic shock and sway arrestor units were being replaced on components of system I.) V-20-4 was manually opened approximately 15 minutes after this valve problem was identified.

Apparent Cause of Occurrence

The apparent cause of this occurrence has not been identified at this time.

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50-219/74/28*

Analysis of Occurrence

Motor-operated valve V-20-4 provides suction to the "B" core spray pump in core spray system II. This valve is normally maintained in the open position. Had core spray system operation been required, the "E" core spray pump would have functioned normally both before performance of the surveillance testing and after the valve was locked in the open position. The safety significance of this event is that for a period of approximately 15 minutes, core spray pump redundancy was lost in system II. Since system I was tagged out of service during this time period, a further degradation in core spray system capability resulted.

Corrective Action

Immediate corrective action involved manually opening the motor-operated valve (V-20-4) and tagging open the associated circuit breaker to prevent subsequent closing. Additional corrective actions will be determined following the completion of the investigation into the cause of this event and a review of the surveillance requirements for this valve will be performed.


Failure Data

The cause for this failure has not been identified at this time.

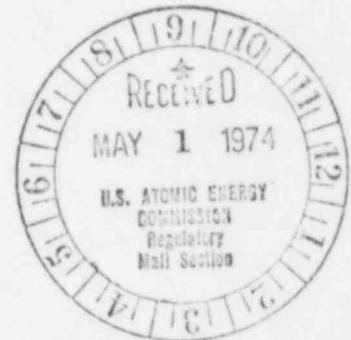
Jersey Central Power & Light Company



MADISON AVENUE AT PUNCH BOWL ROAD • MORRISTOWN, N. J. 07960 • 201-539-6111

General  Public Utilities Corporation

April 26, 1974



Mr. A. Giambusso
Deputy Director for Reactor Projects
Directorate of Licensing
United States Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Giambusso:

Subject: Oyster Creek Station
Docket No. 50-219
Abnormal Occurrence Report No. 50-219/74/28

The purpose of this letter is to forward to you the attached Abnormal Occurrence Report in compliance with paragraph 6.6.2.a of the Technical Specifications.

Enclosed are forty copies of this submittal.

Very truly yours,

Donald A. Ross
Manager, Nuclear Generating Stations

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Enclosures

cc: Mr. J. P. O'Reilly, Director
Directorate of Regulatory Operations, Region I

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ADDENDUM

Abnormal Occurrence Report No. 50-219/74/28

Abnormal Occurrence Report No. 50-219/74/28, occurrence date April 19, 1974, reported that motor-operated valve V-20-4 failed to open electrically after closing electrically in a normal manner during the performance of surveillance testing on core spray system II. Since valve V-20-4 provides suction to the "B" core spray pump, core spray pump redundancy was lost in system II during the period of time that the valve was stuck in the closed position. Immediate corrective action involved manually opening the motor-operated valve (V-20-4) and tagging open the associated circuit breaker to prevent subsequent closing.

Since core spray system I was tagged out for maintenance at the time of this abnormal occurrence, it was not immediately possible to troubleshoot and determine the cause of the V-20-4 failure. Consequently, the initial abnormal occurrence report did not identify the cause of the valve failure. The purpose of this addendum is to report the apparent cause of the failure, additional items of corrective action and pertinent failure data.

Apparent Cause of Occurrence

Refer to the attached schematic diagram of the opening and closing control circuitry for V-20-4 (Figure 1). Torque switch TS-0 is provided to interrupt the control circuitry if a mechanical overload occurs during the opening cycle. Position switch 20-C is provided to override the function of TS-0 during the initial stages of the opening cycle. This position switch (20-C) is normally adjusted to open at approximately 10% of valve travel. Investigation of the control circuitry after the abnormal occurrence revealed that 20-C was opening prematurely at 6% to 7% of valve travel. It has, therefore, been concluded that 20-C opened before torque switch TS-0 closed, thereby preventing V-20-4 from opening.

Additional Corrective Action

Position switch 20-C was readjusted to open at approximately 10% of valve travel.

Failure Data

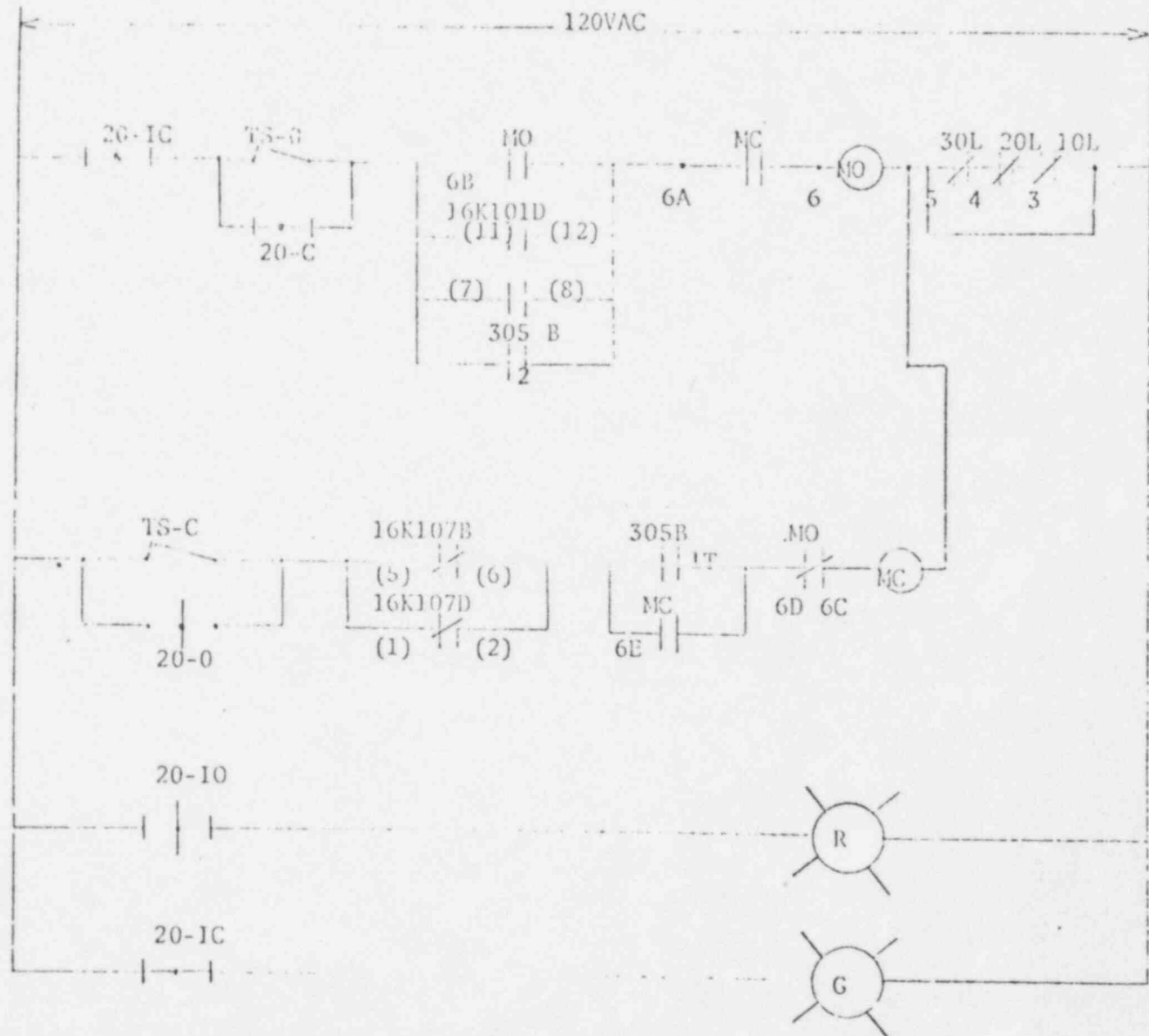
Manufacturer data pertinent to the V-20-4 valve control are as follows:

Manufacturer:	Limitorque
Model No.:	391667-ES
Motor HP:	.67

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Figure 1

Opening And Closing Control Circuitry For V-20-4



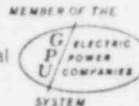
- IC - Closed during 1st 90% of Travel
- IO - Open after 1st 10% of Travel
- TS-O - Torque Switch Open
- TS-C - Torque Switch Closed
- MO - Motor Open
- MC - Motor Closed

Jersey Central Power & Light Company



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General



Public Utilities Corporation

July 11, 1974

Mr. A. Giambusso
Deputy Director for Reactor Projects
Directorate of Licensing
United States Atomic Energy Commission
Washington, D. C. 20545



Dear Mr. Giambusso:

Subject: Oyster Creek Station
Docket No. 50-219
Addendum to Abnormal Occurrence
No. 50-219/74/28

In my report of Abnormal Occurrence No. 50-219/74/28 dated April 26, 1974, complete information on the Apparent Cause of the Occurrence, Corrective Action, and Failure Data was not furnished since the investigation of this occurrence had not been completed on April 26. This investigation has now been completed. The attached report is an addendum to Abnormal Occurrence No. 50-219/74/28 and serves to complete the original report.

Enclosed are forty copies of this submittal.

Very truly yours,

Donald A. ROSS
Manager, Nuclear Generating Stations

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Enclosures

Handwritten: 50-219

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