

P.O. Files



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. 50-219/74/39

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

Preliminary Approval:

J. T. Carroll, Jr. 7/16/74
J. T. Carroll, Jr. Date

cc: Mr. A. Gianbusso

Handwritten: 50-219

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Initial Telephone
Report Date: 7/15/74

Date of
Occurrence: 7/14/74

Initial Written
Report Date: 7/16/74

Time of
Occurrence: 2300

OYSTER CREEK NUCLEAR GENERATING STATION
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence
Report No. 50-219/74/ 39

IDENTIFICATION
OF OCCURRENCE:

Violation of the Technical Specifications, paragraph 2.3.4,
Electromatic Relief Valve Pressure Switches 1A83A, 1A83B,
1A83C, and 1A83E were found to trip at pressures in excess of
the maximum allowable value of 1070 psig.

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

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

The reactor mode switch was in the REFUEL position with
reactor coolant temperature approximately 150°F.

DESCRIPTION
OF OCCURRENCE:

On Sunday, July 14, 1974, while performing surveillance on
the five Electromatic Relief Valve Pressure Switches, it was
found that 1A83A, 1A83B, 1A83C, and 1A83E tripped at 1083
psig, 1094 psig, 1085 psig, and 1089 psig, respectively.
These values are in excess of the maximum allowable trip
points indicated below, which are derived by adding appropriate
head correction factors to the Technical Specification limit
of 1070 psig. The Electromatic Relief Valve Pressure Switches
were immediately recalibrated to their correct setpoints, as

indicated below:

Switch	Associated Valve	"Desired" Setting	"As Found" Setting	"As Left" Setting
1A83A	NR108A	1079 psig	1083 psig	1079 psig
1A83B	NR108B	1084 psig	1094 psig	1084 psig
1A83C	NR108C	1077 psig	1085 psig	1077 psig
1A83D	NR108D	1082 psig	1080 psig	1082 psig
1A83E	NR108E	1082 psig	1089 psig	1082 psig

APPARENT CAUSE
OF OCCURRENCE:

<input type="checkbox"/> Design	<input type="checkbox"/> Procedure
<input type="checkbox"/> Manufacturer	<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 checked="" type="checkbox"/> Other (Specify)

Setpoint repeatability has been tentatively identified as the cause of this occurrence.

ANALYSIS OF
OCCURRENCE:

The relief valves are provided to remove sufficient energy from the primary system to prevent the safety valves from listing during a transient. The limiting pressure transient is that which is produced upon a turbine trip from rated design power with a failure of the bypass system to function. Under these conditions, the five (5) relief valves are required to operate in order to prevent the pressure excursion from reaching the lowest setpoint of the primary system safety valves. It should be noted that a 25 psi margin exists between the resulting peak pressure and the lowest safety valve setpoint as added assurance that the safety valves will not lift during this transient. With valves NR108A, NR108B, NR108C, and NR108E actuating at from 4 psig to 10 psig above the maximum allowable trip point of 1070 psig, and assuming the most limiting pressure

transient had occurred, the lowest setpoint safety valve or valves may have been required to actuate in order to limit the pressure transient. Since the safety valve capacity is based upon providing sufficient vessel over-pressure protection upon failure of all pressure relieving devices, in addition to a failure of the reactor to scram, over-pressurization of the vessel would not have occurred.

CORRECTIVE
ACTION:

To be provided following Plant Operations Review Committee review of this event.

FAILURE DATA:

Manufacturer data pertinent to these switches:

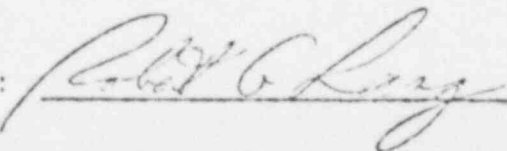
Manufacturer - Dresser

Type - 1539VX

Serial Numbers - 1A83A - BK3337
1A83B - BK3339
1A83C - BK3340
1A83E - BN7126

Reference: Abnormal Occurrence Report No. 50-219/74/29,
dated April 23, 1974.

Prepared by:



Date:

7/15/74

Jersey Central Power & Light Company



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

General



Public Utilities Corporation

July 23, 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. 50-219/74/39

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

CS
Enclosures

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

Handwritten: 50-219

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Jersey Central Power & Light Company



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General  Public Utilities Corporation

OYSTER CREEK NUCLEAR GENERATING STATION FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence
Report No. 50-219/74/39

Report Date

July 23, 1974

Occurrence Date

July 14, 1974

Identification of Occurrence

Violation of the Technical Specifications, paragraph 2.3.4, electromatic relief valve pressure switches 1A83A, 1A83B, 1A83C, and 1A83E were found to trip at pressures in excess of the maximum allowable value of 1070 psig. This event is considered to be an abnormal occurrence as defined in the Technical Specifications, paragraph 1.15A.

Conditions Prior to Occurrence

The reactor mode switch was in the REFUEL position with reactor coolant temperature approximately 150°F.

Description of Occurrence

On Sunday, July 14, 1974, while performing surveillance on the five electromatic relief valve pressure switches, it was found that switches 1A83A, 1A83B, 1A83C, and 1A83E tripped at 1083 psig, 1094 psig, 1085 psig, and 1089 psig, respectively. These values are in excess of the maximum allowable trip points indicated below which are derived by adding appropriate head correction factors to the Technical Specification limit of 1070 psig. These trip point values are within the design limitations of the switch. The electromatic relief valve pressure switches were immediately recalibrated to their correct set points as indicated below:

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<u>Switch</u>	<u>Associated Valve</u>	<u>"Desired" Setting</u>	<u>"As Found" Setting</u>	<u>"As Left" Setting</u>
1A83A	NR108A	1079 psig	1083 psig	1079 psig
1A83B	NR108B	1084 psig	1094 psig	1084 psig
1A83C	NR108C	1077 psig	1085 psig	1077 psig
1A83D	NR108D	1082 psig	1080 psig	1082 psig
1A83E	NR108E	1082 psig	1089 psig	1082 psig

Apparent Cause of Occurrence

The cause of this occurrence is the lack of allowance for set point tolerances in the Technical Specifications.

Analysis of Occurrence

The relief valves function to remove sufficient energy from the primary system to prevent the safety valves from lifting during a transient. The limiting pressure transient is that which is produced upon a turbine trip from rated design power with a failure of the bypass system to function. Under these conditions, the five relief valves are required to operate in order to prevent the pressure excursion from reaching the lowest set point of the primary system safety valves. It should be noted that a 25 psi margin exists between the resulting peak pressure and the lowest safety valve set point as added assurance that the safety valves will not lift during this transient. With valves NR108A, NR108B, NR108C, and NR108E actuating at from 4 psig to 10 psig above the maximum allowable trip point of 1070 psig, and assuming the most limiting pressure transient had occurred, the lowest set point safety valve or valves may have been required to actuate in order to limit the pressure transient. Since the safety valve capacity is based upon providing sufficient vessel overpressure protection upon failure of all pressure relieving devices, in addition to a failure of the reactor to scram, overpressurization of the vessel would not have occurred.

Corrective Action

These switches were reset and surveilled satisfactorily. Jersey Central Power & Light Company, GPU Service Corporation, and General Electric Company personnel, as stated in Abnormal Occurrence Report No. 50-219/74/35, are continuing to investigate this generic problem of set point tolerance.

Failure Data

Manufacturer data pertinent to these switches:

Manufacturer - Dresser
Type - 1539VX
Serial Numbers - 1A83A - BK3337
 1A83B - BK3338
 1A83C - BK3340
 1A83E - BN7126