

PO File

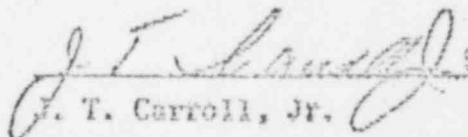
To: James P. O'Reilly
Directorate of Regulatory Operations
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

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

Subject: Abnormal Occurrence Report No. 50-219/74/48

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

Preliminary Approval:

 9/30/74
J. T. Carroll, Jr. Date

cc: Mr. A. Giambusso

8304080110 741004
PDR ADOCK 05000219
S PDR

50-219
incident

Initial Telephone

Report Date: 9/27/74

Date of

Occurrence: 9/27/74

Initial Written

Report Date: 9/30/74

Time of

Occurrence: 1325

OYSTER CREEK NUCLEAR GENERATING STATION
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence
Report No. 50-219/74/ 48

IDENTIFICATION
OF OCCURRENCE:

Violation of the Technical Specifications, paragraph 2.3.7,
Main Steam Line Low Pressure Switch RE23A was found to trip
at a pressure less than the minimum required value of 860
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 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:	Reactor, 998 MWt
	Electric, 300 MWe
Flow:	Recirc., 20.2×10^6 lb/hr
	Feed., 3.4×10^6 lb/hr
Reactor Pressure:	1020 psig
Stack Gas:	9,850 μ Ci/sec

DESCRIPTION OF
OCCURRENCE:

On Friday, September 27, 1974, at 1325, while performing a
routine surveillance test on the four Main Steam Line Low
Pressure Switches, it was discovered that switch RE23A tripped
at 855 psig. This value is below the minimum required trip
point of 860 psig which is derived by adding to the Technical
Specification limit of 850 psig a 10 psig head correction

The "as found" and "as left" switch settings were:

	<u>"As Found" Settings</u>	<u>"As Left" Settings</u>
RE23A	855 psig	860 psig
RE23B	860 psig	860 psig
RE23C	860 psig	860 psig
RE23D	860 psig	860 psig

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 checked="" type="checkbox"/> Other (Specify)

The cause of this occurrence is switch repeatability, which is a recognized problem.

ANALYSIS OF
OCCURRENCE:

As indicated in the bases of the Technical Specifications, "The low pressure isolation of the Main Steam Lines at 850 psig was provided to give protection against fast reactor depressurization and the resultant rapid cooldown of the vessel. Advantage was taken of the scram feature which occurs when the Main Steam Isolation Valves are closed to provide for reactor shutdown so that high power operation at low reactor pressure does not occur, thus providing protection for the fuel cladding integrity safety limit.

The adverse consequences of reactor isolation occurring at reactor pressure approximately 5 psig below the specified minimum value of 860 psig is limited to those effects attendant to a greater than normal reactor cooldown rate. The

for power operation at reactor pressures less than 600 psig or for power operation greater than 354 MWt with less than 10% recirculation flow. Therefore, the consequences of a 5 psig lower than normal reactor isolation and scram setpoint has no threatening effect whatsoever on the fuel cladding integrity.

The effects of a too rapid cooldown due to the lower isolation pressure are inconsequential since there is less than 1°F difference between the saturation temperature for 850 psig and 845 psig.

CORRECTIVE
ACTION:

Steam line pressure variations during daily stop valve testing make it impractical to include in the switch setpoint the normal trip point variations to provide a sufficient margin above the Technical Specification limit.

Setpoint accuracy and tolerance in not only these instruments but in others as well is under investigation by Company and GPU personnel with General Electric Company.

FAILURE DATA:

Manufacturer data pertinent to these switches are as follows:

Isletron Corp. (subsidiary of Barksdale)
Los Angeles, California
Pressure Actuated Switch
Model 372
Catalog #372-6SS49A-293
Range 20-1400 psig
Proof Pri. 1750 G

Previous Abnormal Occurrence Reports involving these switches are:

1. Letter to Mr. A. Giambusso from Mr. B. A. Ross, dated December 24, 1973.
2. Abnormal Occurrence Report No. 74-1.
3. Abnormal Occurrence Report No. 74-9.
4. Abnormal Occurrence Report No. 74-10.
5. Abnormal Occurrence Report No. 74-12.
6. Abnormal Occurrence Report No. 74-22.
7. Abnormal Occurrence Report No. 74-35.
8. Abnormal Occurrence Report No. 74-37.
9. Abnormal Occurrence Report No. 74-41.
10. Abnormal Occurrence Report No. 74-42.
11. Abnormal Occurrence Report No. 74-43.