

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 #50-319/74/43
Forked River, New Jersey 08731



Subject: Abnormal Occurrence Report No. 50-219/74/43

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

Preliminary Approval:

J. T. Carroll, Jr. for 8/2/74
J. T. Carroll, Jr. Date

cc: Mr. A. Giambusso✓

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Initial Telephone
Report Date: 8/2/74

Date of
Occurrence: 8/2/74

Initial Written
Report Date: 8/2/74

Time of
Occurrence: 1000

OYSTER CREEK NUCLEAR GENERATING STATION
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence
Report No. 50-219/74/ 43

IDENTIFICATION
OF OCCURRENCE:

Violation of the Technical Specifications, paragraph 2.3.7,
Main Steam Line Low Pressure Switch, RE23B, 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"/> <u>Steady State Power</u>	<input type="checkbox"/> <u>Routine Shutdown</u>
<input type="checkbox"/> <u>Hot Standby</u>	<input type="checkbox"/> <u>operation</u>
<input type="checkbox"/> <u>Cold Shutdown</u>	<input type="checkbox"/> <u>Load Changes During</u>
<input type="checkbox"/> <u>Refueling Shutdown</u>	<input type="checkbox"/> <u>Routine Power Operation</u>
<input type="checkbox"/> <u>Routine Startup</u>	<input type="checkbox"/> <u>Other (Specify)</u>
<input type="checkbox"/> <u>Operation</u>	

Power:	Reactor, 1906 MWt
	Electric, 638 MWe
Flow:	Recirc., 60.0×10^6 lb/hr
	Feed., 7.13×10^6 lb/hr
Reactor Pressure:	1020 psig
Stack Gas:	11,200 μ Ci/sec

DESCRIPTION OF
OCCURRENCE:

On Friday, August 2, 1974, at 1000, while performing a routine
surveillance test on the four Main Steam Line Low Pressure
Switches, it was discovered that switch RE23B tripped at 855
psig. This value is below the minimum required trip point of
860 psig which is derived by adding to the Technical Specifi-
cation limit of 850 psig a 10 psig head correction factor.

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

	<u>"As Found" Settings</u>	<u>"As Left" Settings</u>
RE23A	863 psig	863 psig
RE23B	855 psig	863 psig
RE23C	860 psig	860 psig
RE23D	863 psig	863 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)

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.

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 atten-

dant to a greater than normal reactor cooldown rate. The fuel cladding integrity safety limit only comes into effect 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:

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:

Manufacture data pertinent to these switches are as follows:

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

Previous Abnormal Occurrence Reports involving these switches are:

1. Letter to Mr. A. Giambusso from Mr. D. 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.

Prepared by:

Arthur H. Rose

Date: _____