



Jersey Central Power & Light Company  
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Morristown, New Jersey 07960  
(201) 455-8200

December 31, 1981

Mr. Ronald Haynes, Director  
Office of Inspection and Enforcement  
Region I  
United States Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, Pennsylvania 19406



Dear Mr. Haynes:

SUBJECT: Oyster Creek Nuclear Generating Station  
Docket No. 50-219  
Licensee Event Report  
Reportable Occurrence No. 50-219/81-66/3L

This letter forwards three copies of a Licensee Event Report to report Reportable Occurrence No. 50-219/81-66/3L in compliance with paragraph 6.9.2.b.1 of the Technical Specifications.

Very truly yours,

*J. T. Carroll, Jr.*  
J. T. Carroll, Jr.  
Acting Director, Oyster Creek

JTC:dh  
Enclosures

cc: Director (40 copies)  
Office of Inspection and Enforcement  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555

Director (3)  
Office of Management Information  
and Program Control  
United States Nuclear Regulatory Commission  
Washington, D. C. 20555

NRC Resident Inspector (1)  
Oyster Creek Nuclear Generating Station  
Forked River, N. J.

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OYSTER CREEK NUCLEAR GENERATING STATION  
Forked River, New Jersey 08731

Licensee Event Report  
Reportable Occurrence No. 50-219/81-66/3L

Report Date

December 31, 1981

Occurrence Date

December 1, 1981

Identification of Occurrence

During surveillance testing, the Main Steam Line high flow sensors RE-22C, RE-22E and RE-22F tripped at values greater than the desired setpoint as given in the Technical Specification, Table 3.1.1 sections B.2 and B.3.

This event is considered to be a reportable occurrence as defined in the Technical Specifications, paragraph 6.9.2.b.1.

Conditions Prior to Occurrence

The plant was operating at steady state power.

Major Plant Parameters

Power:     Reactor         1900 MWt  
           Generator        649 MWe

Flow:     Recirculation     $15.4 \times 10^4$  gpm  
           Feedwater        $7.14 \times 10^6$  lb/hr

Description of Occurrence

During performance of the High Flow in the Main Steam Line Test and Calibration Surveillance, high flow sensors RE-22C, RE-22E and RE-22F tripped at values greater than the Technical Specification limit of  $<97.5$  psid. The testing yielded the following data:

<u>Sensor Designation</u>	<u>Desired Setpoint (psid)</u>	<u>As Found (psid)</u>	<u>As Left (psid)</u>
RE-22A	$<92.5$	93.0	93.0
RE-22B	$<92.5$	96.0	92.5
RE-22C	$<92.5$	99.0	92.0
RE-22D	$<92.5$	94.5	92.0
RE-22E	$<92.5$	101.0	92.0
RE-22F	$<92.5$	100.0	91.5
RE-22G	$<92.5$	97.0	92.0
RE-22H	$<92.5$	96.5	92.5

### Apparent Cause of Occurrence

The causes are attributed to instrument repeatability and instrument drift. The total design accuracy is  $+7.25$  psid (6.0 psid due to instrument accuracy and 1.25 psid due to calibration accuracy). Sensor RE-22C was last reset at 92 and tripped at 99.0, therefore, it was operating within the design criteria of the instrument (repeatability). Sensors RE-22E and RE-22F were both last reset at 92.5 and tripped at 101.0 and 100.0, so they were, therefore, operating outside of the design criteria (drift).

### Analysis of Occurrence

Both of the Main Steam Lines will isolate due to a line break as sensed by either a high temperature or a high flow condition. Each line contains 4 high flow sensors, which are part of the logic system which will initiate closure of the Main Steam Isolation Valves (MSIV). The logic system contains 2 channels, and initiation of MSIV closure requires a signal from both channels. Additionally, each channel containing 4 sensors is further divided into 2 circuits.

With the existing logic system, the event is limited to a temporary loss of redundancy in each circuit of one trip channel and one circuit of the other trip channel. In the case of RE-22C, sensor RE-22G is located in the same trip circuit and would have actuated within the required limit. In the case of RE-22E and RE-22F, sensors RE-22A and RE-22B respectively are located in the same trip circuits and they also would have actuated within the desired limit. Based on the above discussion, the safety significance of the occurrence is considered minimal.

### Corrective Action

All of the sensors were reset to trip within the procedural limits of  $92.5+1$  psid (note the "As Left" values in the Description of Occurrence). An engineering study to investigate the problem of repeatability associated with this type of sensor has recommended the replacement of this type of sensor with qualified sensors of improved accuracy. The replacement is planned for a future refueling outage.

### Failure Data

Manufacturer: ITT Barton  
Model: #228A Pressure Indicating Snap Action Switch  
Range: 0-200 psid