

OYSTER CREEK NUCLEAR GENERATING STATION
Forked River, New Jersey 08731

Licensee Event Report
Reportable Occurrence No. 50-219/80-60/3L

Report Date

January 9, 1981

Occurrence Date

December 11, 1980

Identification of Occurrence

Isolation Condenser (condensate) pipe break sensors IB11A1, IB11A2, IB11B1 and IB11B2 tripped at a value greater than that specified in the Technical Specifications, Table 3.1.1 Item H.2.

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 at the time of occurrence were:

Power: Core 1883 Mwt
Electrical 652 MWe

Flow: Recirculation 15.5×10^4 gpm
Feedwater 7.0×10^6 lb/hr

Description of Occurrence

On Thursday, December 11, 1980 (Condenser "A") and Friday, December 12, 1980 (Condenser "B"), while performing the "Isolation Condenser Isolation Test and Calibration", the trip points for the condensate pipe break sensors were found to be less conservative than that specified in the Technical Specifications. Surveillance testing on the switches yielded the following data:

<u>Pressure Switch Designation</u>	<u>Desired Setpoint</u>	<u>As Found Trip Point</u>	<u>As Left Trip Point</u>
IB11A1	$\leq 27"$ H ₂ O [△] P	31.8" H ₂ O [△] P	26.7
IB11A2	$\leq 27"$ H ₂ O [△] P	28.5" H ₂ O [△] P	26.3
IB11B1	$\leq 27"$ H ₂ O [△] P	30.0" H ₂ O [△] P	26.8
IB11B2	$\leq 27"$ H ₂ O [△] P	30.0" H ₂ O [△] P	26.7

Apparent Cause of Occurrence

The cause of the occurrence is attributed to instrument drift.

Analysis of Occurrence

The Isolation Condenser pipe break sensors are designed to provide protection in the event of a pipe break, occurring in the steam or condensate lines to the condensers, outside the containment. The flow sensors are located on pipe elbows inside the containment. During normal plant operation the Isolation Condensers are in a standby condition with the condensate return lines isolated by normally closed containment isolation valves.

In the event of a pipe break occurring outside the containment during isolation condenser system operation, the steam line flow sensors (which were operating within technical specification limits) would have actuated to isolate the affected condenser in the required manner. The condensate line flow sensors also would have actuated but at a slightly higher flow corresponding to the "as found" trip point.

Corrective Action

The switches were adjusted to trip within the Technical Specifications limit of 27" of H₂O differential pressure as part of the test procedure. An engineering study is currently underway to investigate the problem of drifting associated with these snap-action type pressure switches. After consideration of the frequency of occurrence of set point drift associated with the ITT Barton differential pressure indicating switches with snap-action, the PORC recommends replacement of the devices with a more suitable, qualified model.

Failure Data

ITT Barton
Model - 288A Indicating Pressure Switch
Range: 0-60" H₂O