

Jersey Central Power & Light Company

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

June 14, 1971

Dr. Peter A. Morris, Director
Division of Reactor Licensing
United States Atomic Energy Commission
Washington D.C. 20545



Dear Dr. Morris:

Subject: Oyster Creek Station
Docket 50-219
High Drywell Pressure Sensor Reset Failure

The purpose of this letter is to report the failure of Containment Spray System High Drywell Pressure Sensor IP 15A to reset after being tripped for surveillance testing.

Following the successful initiation of the Containment Spray System on May 7, 1971, which requires the coincident signal of two Reactor Lo Lo Water Level sensors and two Drywell Hi Pressure sensors, the signals were immediately removed and the pumps automatically stopped when the drywell pressure indication dropped below 1 psig. However, since the pump operability check was to be conducted concurrently, the sensors were again tripped to initiate the system and were maintained in that condition until the pump operability check was completed.

After the signals were removed and the mode switch placed in "Dynamic I" in preparation for returning the system to normal, the Containment Spray System "Auto Start" signal alarm was actuated. The alarm was not actuated with the mode switch in "Automatic I". After the Reactor Lo Lo Water Level and Hi Drywell Pressure signals were removed, troubleshooting revealed the problem to be a failure of the 2 psig increasing trip portion of IP 15A to reset. By alternately increasing and decreasing the vacuum drawn on the low side of the sensor, which increases and decreases the differential pressure on the bellows assembly, the 2 psig trip finally reset. A differential pressure was again applied to the switch to check the trip and reset function, but this time the trip did not occur until pressure had been increased to approximately 3.7 psig. The high trip point was reset to 2 psig and the switch actuation then checked satisfactorily twice.

*IS/OR/Staff 6/22/71
RHE
LX*

8305040724 710614
PDR ADDCK 05000219
S PDR

13250

2799

COPY SENT REGION

Dr. Peter A. Morris
Page II
June 14, 1971

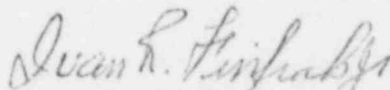
On May 10, 1971, it was decided to check the Containment Spray System Automatic Actuation again due to the erratic behavior of IP 15A on May 7. The switches operated properly at their designated set points but again, after removal of the test signals and transfer of the mode switch to "Dynamic I", the Containment Spray System I "Auto Start" signal alarm was actuated indicating no reset action of sensor IP 15A. A thorough investigation of the sensor proved that the magnet attached to the bellows which actuates the 2 psig increasing portion of IP 15A had pivoted out of position, preventing the switch contacts from resetting. However, once reset, the switch set point was changed resulting in the increase from 2 psig to 3.7 psig. The magnet was realigned and secured, the switch reassembled, and the set point readjusted to 2 psig. After ten satisfactory trip and reset checks, the sensor was returned to service.

Although the Containment Spray System was initiated at the proper set point in each of three actuation tests, Containment Spray System I may not have been initiated at the proper time if the cause of the change in set point had not been discovered and rectified. As stated in Section VI of the FDSAR and Amendment 32, only one Containment Spray Cooling System is required to remove heat from the primary containment following a design basis accident. The redundant system would have satisfied that requirement. Further, the Technical Specifications permit power operation to continue for a period not to exceed seven days if one Containment Spray loop is out of service. On May 10, 1971, when the switch malfunction became evident, repairs were initiated and the problem corrected immediately.

A check of other indicating switches of this type will be made and measures will be taken to prevent the set screws holding the magnets in position from loosening.

Twenty-five copies of this report are attached.

Very truly yours,



Ivan R. Finfrack, Jr.
Manager, Nuclear Generating Stations

IRF/pk

Attachments

cc: Mr. R. W. Kirkman, Regional Director
Division of Compliance