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 #50-219
Forked River, New Jersey 08731

Subject: Abnormal Occurrence Report No. 73-30

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

Preliminary Approval:

J. T. Carroll, Jr. 12/13/73
J. T. Carroll, Jr. Date

cc: Mr. A. Giambusso

B/50

Preliminary
Abnormal Occurrence
Report No. 73-30

12/6/73
1:30 P.M.

SUBJECT: Violation of the Technical Specifications, paragraph 2.3.7, Low Pressure Main Steam Line pressure switches were found to trip at a pressure greater than 850 psig.

This event is considered to be an abnormal occurrence as defined in the Technical Specifications, paragraph 1.15A. Notification of this event, as required by the Technical Specifications, paragraph 6.6.2a, was made to Mr. E. Greenman, AEC Region I, Directorate of Regulatory Operations, on Wednesday, December 12, 1973, during his visit to the plant, and by telecopier on Thursday, December 13, 1973, at

SITUATION: On Thursday, December 6, 1973, while performing surveillance testing on the four (4) Main Steam Line Low Pressure Switches, RE23A, B, C, and D, all four switches were found to trip at pressures between 15 and 50 psig below the minimum required set-point of 850 psig. Manufacturer data pertinent to the switches is as follows:

Meletron Corp. (subsidiary of Barksdale)
Los Angeles, California
Pressure Actuated Switch
Model 372
Catalog #372-6SS49A-293
Range 850 G Dec.
Proof Psi. 1750 G

The "as found" trip values were recorded as follows:

RE23A - 835
RE23B - 835
RE23C - 800
RE23D - 820

CAUSE: At this time, the cause of this event has not been determined. Plant personnel have contacted the manufacturer who ascertained that problems of setpoint drift with instruments of this type have been recognized. Currently, the manufacturer is conducting a study with General Electric to investigate and resolve this drift problem. The results of this study are to be reported to the AEC by the manufacturer and General Electric.

REMEDIAL ACTION:

All four switches were reset to conform with the Technical Specification requirement of $\geq$850 psig. The calibration of the test device was rechecked and found to be accurate, substantiating that the switches, in fact, tripped at the indicated values.

SAFETY SIGNIFICANCE:

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 resulting rapid cooldown of the vessel. Advantage was taken of the scram feature which occurs when the Main Steam Line 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 temperature difference for saturated steam at 850 psig and 800 psig is less than 8°F; thus, the resulting cooldown effect is considered to be negligible.

December 6, 1973

With regards to power operation below 850 psig and the attendant effects on the fuel cladding integrity safety limit, power level must be limited when pressure is less than 600 psig or flow is less than 10% to 354 MWT or approximately 18.3% of rated. As stated in the Technical Specifications, "This value is applicable to ambient pressure and no flow conditions. For any greater pressure or flow conditions there is increased margin." The fuel cladding integrity safety limit curve has been developed and is applicable for pressure in excess of 600 psig. Therefore, whether a reactor scram occurs at 850 psig or 800 psig has little safety significance since no severe restrictions on critical heat flux are imposed until pressure is less than 600 psig.

Prepared by: J. J. Sullivan Jr. Date: Dec. 13, 1973