Report Date:

1/7/74

Occurrence:

1105

OYSTER CREEK NUCLEAR GENERATING STATION FORKED RIVER, NEW JERSEY 08731

> Abnormal Occurrence Report No. 50-219/74/ 1

IDENTIFICATION OF OCCURRENCE: Violation of the Technical Specifications, paragraph 2.3.7, Low Pressure Main Steam Line Pressure Switch (RE23C) was found to trip at a pressure less than 850 psig.

This event is considered to be an abnormal occurrence as defined in the Technical Specifications, paragraph 1.15A

CONDITIONS PRIOR TO OCCURRENCE:

- X Steady State Power Hot Standby Cold Shutdown Refueling Shutdown Routine Startup Operation
- Routine Shutdown Operation Load Changes During Routine Power Operation Other (Specify)

The major plant parameters at the time of the event were as follows:

Power - Core, 1830 MAt Elec., 642 MNe (g) Flow - Recirc., 60.2 X10⁶ #/hr Feed., 6.77 X10⁶ # hr Stack Gas - 24,000 µCi/Sec

DESCRIPTION OF OCCURRENCE: On Friday, January 4, 1974 at 1105, while performing surveillance testing on the four Main Steam Line Low Pressure Switches, RE23A, B, C, and D, RE23C was found to trip at 841 psig which is 9 psig below the minimum required setpoint of 850 psig. The other pressure switches were found to trip at the following values:

RE23A - 850 psig RE23B - 851 psig RE23D - 851 psig RE23D - 851 psig

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APPARENT CAUSE OF OCCURRENCE:

Unusual Service Condition
Component Failure Other (Specify)

At this time, the cause of this event, which has occurred in the past, has yet to be determined. In the past, the manufacturer had been contacted and had informed plant personnel that the problem of setpoint drift has been recognized with this type of instrument. An investigative program has been initiated by the manufacturer, but no formel report on the results issued as of yet.

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 resulting rapid cooldow: 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."

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 Report No. 50-219/74/ 1

flow is less than 10% to 354 MWt or approximately 18.3% of rated. As stated in the Technical Specifications, "The 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 841 psig has little safety significance since no severe restrictions on critical heat flux are imposed until pressure is less than 600 psig. In addition, the remaining three (5) sensors were operable and would have performed the protective action, if required and at the proper setpoint of >850 psig.

CORRECTIVE ACTION: The pressure switch (RE23C), upon discovery of this condition, was reset to 850 psig to conform with the Technical Specifications.

Recommendations to correct the abnormal occurrence and prevent repetition of the occurrence and of similar occurrences will be provided after review by the Plant Operations Review Committee.

FAILURE DATA:

Manufacturer data pertinent to these switches are as follows:

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

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Prepared by:

4 1974 Date: