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DESCRIPTION:

Ltr Reporting Abnormal Occurrence 74-19 on 10-17-74 regarding Failure of the 1C Makeup Pump to start during an ESAS Test.....

ENCLOSURES:

ACKNOWLEDGED

DO NOT REMOVE

PLANT NAME: Three Mile Island Unit1

FOR ACTION/INFORMATION 11-1-74 JGB

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OCT 2 5 1974

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Regulatory File Cy.

Director
Directorate of Licenisng
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Sir:

Docket No. 50-289
Operating License DPR-50

In accordance with the Technical Specifications for our Three Mile Island Nuclear Station, Unit 1, we are reporting the following Abnormal Occurrence:

(1) Report Number: AO 50-289/74-19

(2a) Report Date: October 25, 1974

(2b) Occurrence Date: October 17, 1974

(3) Facility: Three Mile Island Nuclear Station, Unit 1

(4) Identification of Occurrence:

Title: Failure of the 1C Makeup Pump to Start during an ESAS Test

Type: An Abnormal Occurrence as defined by the Technical Specifications, paragraph 1.8d, in that the failure of the 1C Makeup Pump to start threatened to cause an Engineered Safeguards feature or system to be incapable of performing its intended function.

(5) Conditions Prior to Occurrence: The reactor was at steady state power with major plant parameters as follows:

Power: Core: 100%
Elec.: 863 MW (Gross)

RC Flow: 142 x 10^6 lbs/hr

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RC Pressure: 2155 psig

RC Temp.: 579°F

PRZR Level: 240 in.

PRZR Temp.: 650°F

(6) Description of Occurrence:

At 1209 hours on October 17, 1974, during performance of the High Pressure and Low Pressure Injection Logic Channel and Component Test on the Engineered Safeguards Actuation System (ESAS), Makeup Pump 1C failed to start. The pump motor had started properly on two previous "auto" actuation attempts, but failed to start on the third.

(7) Designation of Apparent Cause of Occurrence:

The apparent cause of the occurrence has been determined to be component failure, in that the breaker's tripping latch spring had become dislodged from its normal position which prevented the breaker from being able to be closed, and the pump motor would not start.

(8) Analysis of Occurrence:

It is believed that the failure of the 1C Makeup Pump to start did not endanger either the health or safety of the public in that only one Makeup Pump is needed to supply emergency coolant to the reactor during a Loss of Coolant Accident. In the present case, the 1B Makeup Pump was already operating and the 1A Makeup Pump was selected for ESAS actuation.

(9) Corrective Action:

Immediate corrective action was taken to verify operability of the 1A and 1B Makeup Pumps, and appropriate actions were taken to replace the 1C Makeup Pump breaker with a spare breaker. The pump was then successfully started on both manual and automatic actuation signals. As a further corrective action, the remaining 4KV ES breakers were also inspected to insure that the latch springs were in the proper position.

At a meeting held after the occurrence, the Plant Operations Review Committee (PORC) reviewed and gave its approval of these actions, and recommended as long-term corrective actions that the affected breaker be further inspected and tested to more closely identify the cause of the failure and that the results of this inspection be applied to the maintenance of the remaining ESAS breakers.

OCT 2 5 1974

The Station Superintendent concurred with PORC's recommendations and has taken appropriate steps to insure their implementation.

(10) Failure Data:

a. Previous Failures

Not Applicable.

b. Equipment Identification

Westinghouse Air Circuit Breaker
50 DH-P 350
Style: 25Y4440B1
Amps: 1200
Rated KV: 4.16
Mech: FAB SPRG

Sincerely,

R. C. Arnold
Vice President

RCA:JFV:sh

cc: Mr. J. P. O'Reilly
Directorate of Regulatory Operations, Region 1
U. S. Atomic Energy Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

File 7.7.3.5.1
20.1.1

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