

50-289

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FILE NUMBER
INCIDENT REPORT

TO: Mr. J. P. O'Reilly

FROM: Metropolitan Edison Company
Reading, Pa.
R. C. Arnold

DATE OF DOCUMENT
4/29/77DATE RECEIVED
5/11/77

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DESCRIPTION

Ltr. trans the following: .

ACKNOWLEDGED

PLANT NAME:

(3-P)

Three Mile Island Unit No. 1

RJL

DO NOT REMOVE

ENCLOSURE

Licensee Event Report (RO 50-289/77-04/1T) on
4/15/77 concerning the vendor-certified valve
capacity being found to be less than that
required in the safety analysis.....

(1-P)

NOTE: IF PERSONNEL EXPOSURE IS INVOLVED
SEND DIRECTLY TO KREGER/J. COLLINS

FOR ACTION/INFORMATION

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EXTERNAL DISTRIBUTION

LPDR:

TIC:

NSIC:

CONTROL NUMBER

771320105

1476 336



METROPOLITAN EDISON COMPANY SUBSIDIARY OF GENERAL ELECTRIC COMPANY

POST OFFICE BOX 542 READING, PENNSYLVANIA 19603

TELEPHONE 215 -- 929-3601

GQL 0572

April 29, 1977

REGULATORY DOCKET FILE COPY

Mr. J. P. O'Reilly, Director
Office of Inspections and Enforcement, Region 1
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Sir:

Docket No. 50-289
Operating License No. DPR-50

In accordance with the Technical Specifications of our Three Mile Island Nuclear Station Unit 1 (TMI-1), we are reporting the following reportable occurrence.

- (1) Report Number: 77-04/1T
- (2a) Required Report Date: 4/29/77
- (2b) Date of Occurrence: 4/15/77
- (3) Facility: Three Mile Island Nuclear Station-Unit 1
- (4) Identification of Occurrence:

Title: Nonconservative error used to support increasing the pressurizer code safety valve setpoint.

Type: A reportable occurrence as defined by Technical Specification 6.9.2.A(8) in that a non-conservative error was discovered in the safety analysis which could have permitted reactor operation in a manner less conservative than that assumed in the FSAR.

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771320105

(5) Conditions Prior to Occurrence:

Power: Core 0
 Elec 0

RC Flow: 0
RC Pressure: 0
RC Temp: Ambient
PRZR Level: 0
PRZR Temp: Ambient

(6) Description of Occurrence:

The error in the safety analysis was discovered during the updating of the valves nameplate data when the vendor-certified valve capacity was found to be apparently less than that required by the safety analysis. The investigation and reanalysis which followed this discovery determined that the total combined relief capacity of the two (2) valves was erroneously assumed to be 619,200 lb/hr at a steam pressure three (3%) percent above the 2500 psig setpoint. A total combined relief capacity of 561,600 lb/hr at a steam pressure three (3%) percent above the 2500 psig setpoint is more representative of the actual safety valve capacity. It is this correction of the total combined valve capacity of 561,600 lb/hr which yielded the 0.3 psig non-conservative error.

(7) Apparent Cause of Occurrence:

The cause of this occurrence has been determined to be personnel error in that, a total combined relief valve capacity value of 623,400 lb/hr from a vendor valve drawing was apparently used in making the assumption that 619,200 lb/hr would be a suitable value to use in the safety analysis supporting the valve setpoint change. It was not apparently recognized that the vendor could not certify this total valve capacity at the steam conditions prescribed by the change to the 2500 psig set pressure. The fact that the incorrect relief valve capacity (from the vendor drawing) had previously been included in the basis for Technical Specification 3.1.1.3 tended to lend credence to this erroneous assumption.

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(8) Analysis of Occurrence:

Because the magnitude of this non-conservative error is relatively insignificant and the margin to the safety limit (2750 psig) is not significantly reduced, it is believed that no significant hazard to the health and safety of the general public could have resulted if the plant had operated with these conditions.

(9) Corrective Action:

IMMEDIATE: The safety analysis was recomputed with the total combined safety valve capacity value set at 561,600 lb/hr. This reanalysis verified the calculated peak pressure to be only 0.3 psig higher than previously calculated (2734 psig). The Code Safety Valves are being tested to verify the 2500 psig setpoint and the actual valve capacity as certified by the vendor is determined to be in excess of the value now required by the safety analysis.

LONG TERM: A Technical Specification change will be submitted to correctly state the relief valve capacity assumed in the safety analysis.

The Plant Operations Review Committee and Unit Superintendent have reviewed and approved the above corrective action and have taken steps to assure its completion.

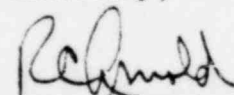
(10) Failure Data:

N/A

Similar Events:

None

Sincerely,



R. C. Arnold
Vice President

RCA:DGM:rk

Attachment : Licensee Event Report

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