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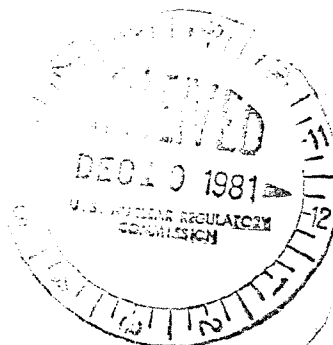


Metropolitan Edison Company
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Writer's Direct Dial Number

November 25, 1981
LL2-81-0275

Office of Inspection and Enforcement
Attn: Mr. Ronald C. Haynes, Director
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406



Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
License Event Report 81-029/01L-0

Attached please find Licensee Event Report 81-029/01L-0 concerning the SDS dewatering station design susceptibility to a single mode failure accident as determined on October 28, 1981.

This condition is considered reportable under Section 6.9.1.8(i) of the Interim Recovery Technical Specifications.

Sincerely,

J. J. Barton
Acting Director, TMI-2

JJB:SDC:djb

Attachments

cc: L. H. Barrett, Deputy Program Director
Dr. B. J. Snyder, Program Director - TMI Program Office
V. Stello, Director I & E
c/o Document Management Branch
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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LICENSEE EVENT REPORT

NARRATIVE REPORT

TMI-II

LER 81-29/01L-0

EVENT DATE - October 28, 1981

Submerged System?

I. EXPLANATION OF OCCURRENCE

While reviewing the SDS dewatering procedure, on October 16, 1981, it was realized that with the existing design of the SDS dewatering station, a failure of the nitrogen supply regulator valve (assuming a failed open condition) could result in an overpressurization of the SDS vessel and potentially cause its rupturing. This would be possible due to the fact that the nitrogen supply, a single high pressure gas cylinder (2200 psi) greatly exceeded the design pressure of dewatering station components (the SDS vessels included). At the same time that this review was being conducted, the nitrogen supply was already in place in order to check the fit of the connections; however, the supply cylinder remained isolated from the ion exchanger by means of three (3) closed valves. As soon as the possible problem with overpressurization of the SDS dewatering station was identified, the nitrogen supply line was disconnected and a relief valve was installed in the line downstream of the pressure regulator. The nitrogen supply line, with the relief valve, was then reinstalled in the system.

After additional information was gathered and consideration given to the subject subsequent to the above mentioned October 16, 1981 procedural review, this condition was determined as reportable on October 28, 1981 per Tech. Spec. section 6.9.1.8(i).

II. CAUSE OF THE OCCURRENCE

The original design of the SDS dewatering station assumed a 100 psi air supply as the pressure source. It was later decided to use a nitrogen source instead. When viewed in the context of a 2200 psi nitrogen pressure source, the original design became inadequate in that pressure relief protection of the dewatering station was not provided.

III. CIRCUMSTANCES SURROUNDING THE OCCURRENCE

At the time of the occurrence, the Unit 2 facility was in a long-term cold shutdown state. The reactor decay heat was being removed via loss to ambient. Throughout the event there was no effect on the Reactor Coolant System or the core.

IV. CORRECTIVE ACTIONS TAKEN OR TO BE TAKEN

IMMEDIATE

Immediately disconnected the nitrogen supply line and inserted a pressure relief valve in the line. This was accomplished by October 17, 1981.

LONG TERM

No further corrective action is appropriate.

V. COMPONENT FAILURE DATA

N/A