

LICENSEE EVENT REPORT
NARRATIVE REPORT
TMI-II
LER 82-020/01L-0
EVENT DATE - June 3, 1982

I. EXPLANATION OF THE OCCURRENCE

From 1600 on June 1, 1982, to 0200 on June 2, 1982, approximately 3.5 inches of rain fell at Three Mile Island (Attachment 3). As a result of this rainfall, and the resulting surface runoff, the accumulated water overflowed the curb surrounding the Borated Water Storage Tank Recirculation Pump Enclosure (BWST Enclosure). This water drained from the BWST Enclosure via a two inch drain line to the Auxiliary Building Sump (Sump). As a result of the increased influx to the sump from the BWST Enclosure, the sump overflowed. Although this event was of minor consequence, it pointed out a deficiency in the TMI-2 flood protection plan as the rainfall causing the event was much less than the probable maximum precipitation for TMI-2 and the elevation of the concrete based pad of the enclosure is less than that of the probable maximum flood.

This event is considered reportable per Section 6.9.1.8(i) due to deficient administrative controls associated with the BWST Enclosure and its affect on TMI-2 flood protection. This event had no effect on the health and safety of the public.

II. CAUSE OF THE OCCURRENCE

The ECM utilized for fabrication of the BWST Enclosure was accompanied by a safety evaluation which considered the possibility of general area flooding in the vicinity of the structure. This safety evaluation stated that the concrete base pad would be a minimum of six inches above grade elevation and the BWST Enclosure would be sealed to prevent inleakage.

Additionally, the safety evaluation identified that sufficient time was available to "water-proof the line" in the event of severe natural phenomena. To satisfy this criteria, the Flood Emergency Procedure was to have been updated, as indicated by the Technical Functions Division Task Record, to plug the drain line from the BWST Enclosure in the event of flooding.

However, the concrete base pad is less than six inches above actual grade elevation and the Flood Emergency Procedure has not been updated. If these items had been completed this event would not have occurred and TMI-2 would not have been vulnerable to flooding.

Thus, this event was caused by a breakdown in the administrative controls associated with the BWST Enclosure project, in that the existing BWST Enclosure did not meet the criteria established for it in the Safety Evaluation and the update to the Flood Emergency Procedure discussed above was not followed up to ensure that it was completed.

An additional circumstance in the issue of the adequacy of the BWST Enclosure to prevent flooding of the Auxiliary Building is that during its turnover inspection performed in March 1982 an open item was identified which expressed a concern with the "rain-tightness" of the BWST Enclosure. However, this item had not been resolved prior to the rainstorm of June 1 and 2, 1982.

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

An inflatable plug was installed in the BWST Enclosure sump drain to control leakage into the Auxiliary Building sump. This area is monitored once per shift to determine if any water accumulation exists and, if so, to drain any existing water to the Auxiliary Building sump in a controlled manner.

Long-Term

In order to prevent flooding, the BWST enclosure will be modified to provide protection from the inleakage of rainwater and local ground flooding. Additionally, the Flood Emergency Procedures for TMI-2 will be updated to incorporate plugging of the BWST Enclosure sump drain in the event of flooding at TMI-2.

To correct the administrative problems, the Technical Functions Division Task Record System will be reviewed to identify if any other items are carried which affect operation of TMI-2 and transferred to the TMI-2 Site Operations Action Item Tracking System.

Open items existing from turnover inspections of other engineering changes affecting important to safety Systems, structures, and components will be reviewed to identify if any significant deficiencies, as determined by the Director, Site Operations, exist and these items will be assigned a schedule and will be tracked as a separate subset on the Site Operations Action Item Tracking System. Engineering changes made during the recovery period but prior to implementation of the existing turnover inspection process are being reviewed to determine which are still being used and of those still being used which are important to safety. Those changes selected from this review will then be subjected to the existing turnover process to determine if any significant deficiencies exist. Significant open items on these turnover inspections and future turnover inspections of important to safety engineering changes will be administered as discussed above.

The schedule for completing these items is being developed and will be provided to the NRC by August 11, 1982.

ATTACHMENT 3Precipitation Record

<u>Date</u>	<u>Time</u>	<u>Amount</u>
June 1, 1982	1600 - 1700	0.43"
	1700 - 1800	2.61"
	1800 - 1900	0.22"
	1900 - 2000	0.14"
	2000 - 2100	0.02"
	2100 - 2200	0.02"
	2200 - 2300	-----
	2300 - 2400	0.03"
June 2, 1982	0000 - 0100	0.07"
	0100 - 0200	0.01"