

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Three Mile Island Unit 2	0 5 0 0 0 3 2 -	1 OF 0 3

TITLE (4)
Flood Protection Dike Minor Degradation

EVENT DATE (6)			LER NUMBER (8)				REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)																	
MONTH	DAY	YEAR	YEAR		SEQUENTIAL NUMBER		REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES					DOCKET NUMBER(S)											
1	0	2	4	8	4	8	4	0	1	7	0	3	1	0	1	0	8	5	0	5	0	0	0				

OPERATING MODE (8)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)									
POWER LEVEL (10)	0 0 0	20.402(b)		20.406(c)		50.73(a)(2)(iv)		73.71(b)			
		20.406(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)			
		20.406(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)	X	OTHER (Specify in Abstract below and in Text, NRC Form 365A)			
		20.406(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		Special Report			
		20.406(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)					
20.406(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)							

LICENSEE CONTACT FOR THIS LER (12)					
NAME	TELEPHONE NUMBER				
Christopher J. Dell, TMI-2 Technical Analyst	<table border="1"> <tr> <td>AREA CODE</td> <td></td> </tr> <tr> <td>7 1 7</td> <td>9 4 8 - 8 2 4 4</td> </tr> </table>	AREA CODE		7 1 7	9 4 8 - 8 2 4 4
AREA CODE					
7 1 7	9 4 8 - 8 2 4 4				

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)											
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

ABSTRACT

In August, 1985, the annual sonar inspection of the TMI Flood Protection Dike was performed. The inspection results revealed that the submerged toe in the vicinity of the TMI-1 and TMI-2 RWPH's exhibited the same level of degradation noted during the October, 1984, survey. The Licensee believes that this degradation is minor and that the submerged toe is currently in a stable condition. Therefore, no corrective repairs are planned nor necessary at this time.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104
EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Three Mile Island Unit 2	0500032084	—	017	—03	02	OF	03

TEXT (If more space is required, use additional NRC Form 366A's) (17)

EVENT DESCRIPTION

On October 24, 1984, upon completion of the TMI Flood Protection Dike semi-annual inspection, it was determined that sections of the submerged toe of the dike, in the vicinity of the TMI-1 and TMI-2 River Water Pump Houses (RWPH's), exhibited evidence of degradation. This degradation was identified by a pole sounding method. Due to the potential inaccuracy of the pole sounding method, a follow-up sonar inspection was performed to substantiate the inspection results. The sonar inspection indicated very minor degradation. The slope of certain sections of the submerged toe in the vicinity of the TMI-1 and TMI-2 RWPH's was found to be steeper than the prescribed baseline slope of 2:1.

The event was reportable per TMI-2 Technical Specification 6.9.2 and Recovery Operations Plan Section 4.7.6.1.3.

The minor fluctuations in the slope of the submerged toe in the vicinity of the TMI-1 and TMI-2 RWPH's were probably caused by the large ice floes and varying extremes of water flowrates experienced in the Susquehanna River. A contributing cause during this specific inspection period may have been the dredging operation which was performed in the vicinity of the TMI-1 and TMI-2 RWPH's in the Spring of 1984 to deepen and widen the intake channel.

As a result of the October, 1984, inspection results, a review of the previous four (4) years inspection results was performed. This review revealed that the slope of the submerged toe of the dike in the vicinity of the RWPH's also exceeded the prescribed 2:1 slope during those periods; however, the degradation had not been reported. Although the slope is steeper than the prescribed baseline slope, the review also indicated that the submerged dike toe had remained stable over the previous four (4) year period.

The degradation was not previously reported due to miscommunication and a misconception as to what constituted "degradation". The minor degradation of the toe was considered acceptable by the inspectors. The miscommunication occurred due to the number of groups involved in the dike inspections. The responsibility for reporting dike degradation had not been clearly established.

Planned corrective actions included revision of the dike inspection procedure to require the use of sonar inspection techniques and to clarify the organizational responsibilities with respect to reporting dike degradation. The licensee also intended to continue monitoring the annual inspections of the submerged dike toe to determine whether further degradation was occurring.

In August, 1985, the annual sonar inspection of the submerged toe in the vicinity of the TMI-1 and TMI-2 RWPH's was performed. The inspection results revealed that the toe exhibited the same minor degradation that was noted during the October, 1984, survey.

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APPROVED OMB NO. 3150-0104
EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
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Three Mile Island Unit 2	0500032084	84	017	030	3	OF	03

TEXT (If more space is required, use additional NRC Form 365A's) (17)

A review of the survey results for the past five (5) years reveals that the submerged toe has been steeper than the baseline criteria; however, no major degradation has taken place during that period. Since the submerged toe is currently in a stable condition and the remainder of the dike shows no sign of slope degradation, the Licensee believes that no corrective repairs are necessary at this time.

The criteria used for determining submerged toe degradation is any vertical deviation of more than one foot from baseline. The baseline used is the profile of the submerged toe, subsequent to the dike repairs performed in 1976 to restore the submerged toe to the required 2:1 slope.

Since the dike has experienced only minor degradation over the past five (5) years and is currently in a stable condition, the Licensee plans to change the baseline criteria used for determining dike toe degradation. The new baseline data used will be the profile of the submerged toe as drawn during the 1984 survey. The allowable vertical deviation from baseline will also be changed from one (1) foot to two (2) feet due to the difficulty in consistently obtaining results of greater accuracy and repeatability.

The above changes do not affect Recovery Operations Plan requirements; the only required revision is to the Licensee's criteria for determining degradation of the submerged toe.



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October 10, 1985

Office of Inspection and Enforcement
Attn: Dr. T. E. Murley
Regional Administrator
US Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

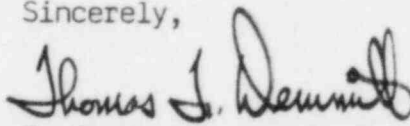
Dear Dr. Murley:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Licensee Event Report 84-17, Revision 3

Attached is an update of Special Licensee Event Report 84-17 which documents minor degradation of sections of the TMI Flood Protection Dike Submerged Toe. The update reflects the results of the 1985 sonar inspection of the submerged toe of the dike.

This report is being submitted in accordance with TMI-2 Technical Specification 6.9.2 and Recovery Operations Plan Section 4.7.6.1.3.

Sincerely,


F. R. Standerfer
Vice President/Director, TMI-2

FRS/CJD/eml

Attachment

cc: Program Director - TMI Program Office, Dr. B. J. Snyder
Deputy Program Director - TMI Program Office, Dr. W. D. Travers
Document Control Desk
Senior Resident Inspector - TMI-1, R. Conti