

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)  
Three Mile Island - Unit 2DOCKET NUMBER (2)  
0 5 0 0 0 3 2 0PAGE (3)  
1 OF 0 4TITLE (4)  
Non-Maintained Open Containment Isolation Valve

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
11	05	85	85	009	00	12	05	85			0 5 0 0 0

OPERATING MODE (9)	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)	50.38(c)(1)	50.73(a)(2)(v)	73.71(c)						
	20.406(a)(1)(ii)	50.38(c)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 386A)						
	20.406(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(vii)(A)							
	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)(ix)							

LICENSEE CONTACT FOR THIS LER (12)

NAME  
Christopher J. Dell, Technical Analyst II - Unit 2TELEPHONE NUMBER  
AREA CODE  
7 1 7 9 4 8 2 4 4

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) ☐ NO ☒ XEXPECTED SUBMISSION DATE (15)  
MONTH DAY YEAR

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

On November 5, 1985, while performing the valve line-up for processing Fuel Transfer Canal (FTC) water, GPU Nuclear discovered that containment isolation valve DWC-V-099 had been in the open position since November 3, 1985. The valve had been opened during previous FTC water processing, in accordance with NRC-approved TMI-2 Operating Procedure 4215-OPS-3527.24, "Fuel Transfer Canal Drain Pump Operation", but was not closed upon completion of processing due to a procedural deficiency. Procedure 4215-OPS-3527.24 permitted DWC-V-099 to be open during FTC water processing but contained no requirement to close the valve once processing was completed. Thus, from November 3, 1985, to November 5, 1985, containment integrity was not maintained as required by the Plant Technical Specifications due to DWC-V-099 being left in the open position. Upon discovery of this condition, a Temporary Change Notice (TCN) to Procedure 4215-OPS-3527.24 was issued. This TCN added DWC-V-099 to the list of valves to be closed at the conclusion of FTC water processing. The above condition constitutes non-compliance with Technical Specification 3.6.1.1, and is reportable pursuant to 10 CFR 50.73(a)(2)(i)(B).

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

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		8 5	0 0 9	0 0	0 2	OF	0 4

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

I. PLANT OPERATING CONDITIONS BEFORE THE EVENT

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

II. STATUS OF STRUCTURES, COMPONENTS, OR SYSTEMS THAT WERE INOPERABLE AT THE START OF THE EVENT AND THAT CONTRIBUTED TO THE EVENT

N/A

III. EVENT DESCRIPTION

On November 5, 1985, while performing the valve line-up for processing Fuel Transfer Canal (FTC) water per TMI-2 Operating Procedure 4215-OPS-3527.24, "Fuel Transfer Canal Drain Pump Operation", it was discovered that containment isolation valve DWC-V-099 (IEEE Code-JM) was open.

TMI-2 Technical Specification 3.6.1.1, "Containment Integrity", requires that "Primary Containment Integrity shall be maintained unless it is not required per procedure approved pursuant to Specification 6.8.2." Technical Specification 6.8.2 requires, in part, NRC approval.

Thus, the event was determined to be reportable, pursuant to 10 CFR 50.73(a)(2)(i)(B), due to a condition prohibited by the plant's Technical Specification.

DWC-V-099 is the second isolation valve outside of containment for Reactor Building Penetration R-539. The first isolation valve, DC-V-103, was closed during the period DWC-V-099 was open. The event description is provided below.

On October 19, 1985, TMI-2 Operating Procedure 4215-OPS-3527.24, "Fuel Transfer Canal Drain Pump Operation", was issued. This NRC-approved procedure permitted the processing of water in the Fuel Transfer Canal (FTC) Deep End via the Submerged Demineralizer System. The procedure permitted containment isolation valves DWC-V-099 and DC-V-103 to be opened during processing operations.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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Three Mile Island	0500032085	85	009	00	03	OF	04

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

On October 22, 1985, at 0243, initial FTC water processing commenced per the requirements of Procedure 4215-OPS-3527.24. At this time, containment isolation valves DC-V-103 and DWC-V-099 were in the open position.

On November 3, 1985, at 1746, the initial processing of FTC water was secured per Section 6.1.10 of Procedure 4215-OPS-3527.24. At that time, DC-V-103 was closed; however, DWC-V-099 was not closed as Procedure 4215-OPS-3527.24 contained no requirement to close the valve.

DWC-V-099 was discovered in the open position on November 5, 1985, at 0530, while performing the valve line-up required for processing FTC water per Section 7.2 of Procedure 4215-OPS-3527.24. Section 7.2 calls for DWC-V-099 to be opened; however, the valve was found in the open position.

Thus, from November 3, 1985, to November 5, 1985, i.e., the discovery date of this event, containment integrity was not maintained as required by the Plant Technical Specifications due to DWC-V-099 being left in the open position.

IV. ROOT CAUSE OF THE EVENT

The root cause of this event was personnel error during the development of Procedure 4215-OPS-3527.24. The requirement to close DWC-V-099 was not included in Section 6.1.10 of Procedure 4215-OPS-3527.24 which lists the valves to be closed at the completion of processing operations.

V. CORRECTIVE ACTIONS PLANNED

Short Term

A Temporary Change Notice (TCN) to TMI-2 Operating Procedure 4215-OPS-3527.24 was issued on November 5, 1985. This TCN added DWC-V-099 to the list of valves in Section 6.1.10 which are to be closed at the conclusion of processing. It also requires independent verification of the closing of containment isolation valves operated in accordance with Procedure 4215-OPS-3527.24.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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Long Term

A Procedure Change Request (PCR) has been submitted to permanently incorporate the changes made by the TCN to Procedure 4215-OPS-3527.24. This event will also be included in Responsible Technical Reviewer/Cognizant Engineer training. The importance of performing detailed review of valve line-ups affecting Technical Specifications control systems will be stressed.

VI. COMPONENT FAILURE DATA

N/A

VII. AUTOMATIC OR MANUALLY INITIATED SAFETY SYSTEM RESPONSES

N/A

VIII. ASSESSMENT OF THE SAFETY CONSEQUENCES AND IMPLICATIONS OF THE EVENT

DWC-V-099 isolates the water return to the FTC. Normally DWC-V-099 is closed in accordance with TMI-2 Surveillance Procedure 4210-SUR-3244.01, "Containment Integrity Verification". The valve was permitted to be opened during FTC water processing under NRC-approved Procedure 4215-OPS-3527.24.

As mentioned previously, DWC-V-099 is the second isolation valve outside of containment for Reactor Building Penetration R-539. The first isolation valve, DC-V-103 which is also outside of containment, was closed during the period when DWC-V-099 was erroneously left open. In addition, check valve DC-V-104, located inside of containment, would have provided additional isolation in the event of an accident even though DC-V-104 is not a designated containment isolation valve. Therefore, this event had no effect on the health and safety of the public.



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4410-85-L-0242  
Document ID 0368A

December 5, 1985

US Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

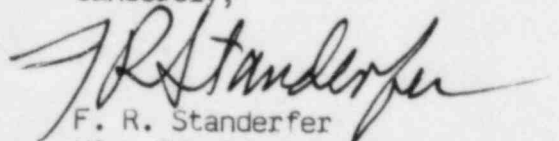
Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)  
Operating License No. DPR-73  
Docket No. 50-320  
Licensee Event Report 85-09

Attached is Licensee Event Report 85-09 concerning a procedural non-compliance with TMI-2 Technical Specification 3.6.1.1. This condition was discovered on November 5, 1985.

This event is considered reportable pursuant to Title 10 of the Code of Federal Regulations, Section 50.73(a)(2)(i)(B).

Sincerely,

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

FRS/CJD/eml

Attachments

cc: Regional Administrator - Office of I & E, Dr. T. E. Murley  
Director - TMI-2 Cleanup Project Directorate, Dr. W. D. Travers

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