



EDISON PLAZA  
300 MADISON AVENUE  
TOLEDO, OHIO 43652-0001

November 10, 1989

Log No.: BB89-01180  
NP33-89-016

Docket No. 50-346  
License No. NPF-3


United States Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

Gentlemen:

LER 89-014  
Davis-Besse Nuclear Power Station, Unit No. 1  
Date of Occurrence - September 25, 1989

Enclosed Licensee Event Report 89-014 which is being provided in accordance with 10CFR50.73(a)(2)(i) to provide written notification of the subject occurrence.

Yours truly,

  
Louis F. Storz  
Plant Manager  
Davis-Besse Nuclear Power Station

LFS/plf

Enclosure

cc: Mr. A. Bert Davis  
Regional Administrator  
USNRC Region III

Mr. Paul Byron  
DB-1 NRC Sr. Resident Inspector

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Davis-Besse Unit No. 1	DOCKET NUMBER (2) 0 5 0 0 0 3 4 1 6	PAGE (3) 1 OF 0 3
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TITLE (4)  
Inoperable Fire Detection Zone 237 and 323 Due to Installation of Plastic Sheeting

EVENT DATE (6)			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)
0	9	25	89	014	00	11	11	08			0 5 0 0 0
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OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)									
POWER LEVEL (10) 1 0 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.406(a)	<input type="checkbox"/> 60.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.406(a)(1)(i)	<input type="checkbox"/> 60.36(a)(1)	<input type="checkbox"/> 60.73(a)(2)(v)	<input type="checkbox"/> 73.71(e)						
	<input type="checkbox"/> 20.406(a)(1)(ii)	<input type="checkbox"/> 60.26(a)(2)	<input type="checkbox"/> 60.73(a)(2)(vii)	<input checked="" type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 366A)						
	<input type="checkbox"/> 20.406(a)(1)(iii)	<input checked="" type="checkbox"/> 60.73(a)(2)(i)	<input type="checkbox"/> 60.73(a)(2)(viii)(A)	Special Report						
	<input type="checkbox"/> 20.406(a)(1)(iv)	<input type="checkbox"/> 60.73(a)(2)(ii)	<input type="checkbox"/> 60.73(a)(2)(viii)(B)							
<input type="checkbox"/> 20.406(a)(1)(v)	<input type="checkbox"/> 60.73(a)(2)(iii)	<input type="checkbox"/> 60.73(a)(2)(ix)								

LICENSEE CONTACT FOR THIS LER (12)

NAME Jan C. Stotz, Engineer - Maintenance Planning	TELEPHONE NUMBER AREA CODE: 4 1 9 3 2 1 - 7 5 4 4
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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) <input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (16) MONTH:    DAY:    YEAR:
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (18)

On October 11, 1989, at 1545 hours, a Modification Supervisor reported to the Shift Supervisor that plastic sheeting was blocking off some fire detectors in Room 237 (Auxiliary Feedwater Pump 1-1 Room) and Room 323 (B High Voltage Switchgear Room). Further investigation determined that this plastic sheeting had been installed since September 25, 1989, to protect surrounding equipment during the removal of old and installation of new structural steel fire proofing material. However, the plastic sheeting had in effect made the detectors inoperable by separating them from the rest of the room atmosphere. The plastic sheeting was subsequently removed by 1615 hours. Some of these room fire barriers had previously been declared inoperable, and with no detection on the opposite side of some of these barriers, a continuous fire watch was required. Since these rooms were only being checked by an hourly fire watch patrol, the appropriate action statement was not being met.

The cause was personnel oversight. The supervisor of the insulating contractor personnel who installed the plastic sheeting failed to recognize that he was sealing off the detectors which rendered them inoperable. The Modification Coordinators and Supervisors were counseled on this incident. The need to be sensitive to and question the effects of their ongoing work on plant equipment and systems was stressed.

This is reportable per 10CFR50.73(a)(2)(i)(B) as a condition prohibited by Technical Specification. Since these detection zones had been inoperable for more than 14 days, this is also being submitted as a Special Report per Technical Specification 3.3.3.8 action "b".

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT: If more space is required, use additional NRC Form 388A's (17)

Description of Occurrence:

On October 11, 1989, at 1545 hours, a Modification Supervisor reported to the Shift Supervisor that fire detectors in Room 237 (Auxiliary Feedwater Pump 1-1 Room) and 323 (B High Voltage Switchgear Room) were being blocked by plastic sheeting used to wall off part of the room. The plastic sheeting barriers had made the detectors inoperable by separating them from the rest of the room atmosphere. This resulted in fewer than the minimum required number of fire detectors in these zones being operable. This requires compliance with the action statement of Technical Specification 3.3.3.8, which requires that with a fire detection zone inoperable, 1) an hourly fire watch patrol be established and 2) that the detectors be restored to an operable status within 14 days. These rooms were already on an existing hourly fire watch patrol route due to previously identified fire barrier deficiencies. Therefore, action "a" of Technical Specification 3.3.3.8 was satisfied. For the impaired fire barriers, an hourly fire watch requires that detectors be verified operable on at least one side of the barrier. Having the detectors inoperable in conjunction with the fire barrier deficiencies requires compliance with action "a.1" of Technical Specification 3.7.10. With the fire detection zones in these rooms inoperable and no detection on the opposite side of some of the barriers, a continuous fire watch is required. Since a continuous fire watch was not established, the Station was not in compliance with Technical Specification 3.7.10, fire barriers.

This is reportable as an LER per 10CFR50.73(a)(2)(i)(B) as a condition prohibited by the Technical Specifications. In addition, since the plastic sheeting had been in place for more than 14 days, this is also being submitted as a Special Report per Technical Specification 3.3.3.8, Action "b" and 6.9.2.

Cause of Occurrence:

The cause of this condition is personnel oversight. The supervisor of the insulating contractor personnel who installed the plastic sheeting failed to recognize that the fire detectors were being sealed off from the rest of the room. This affected their operability and the conditions listed on the Technical Specification Operability Checkoff List, Attachment 13, of the Maintenance Work Order packages. The requirement to have these room detection zones operable in order for the hourly fire watch to satisfy the action statements was listed on Attachment 13.

Analysis of Occurrence:

Operability of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Plastic sheeting would not have prevented the eventual detection of a fire, but since these detectors are designed to respond to smoke, the plastic sheeting would have significantly delayed its response.

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
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TEXT IF more space is required, use additional NRC Form 3054's (17)

The hourly fire watch patrol that was in place still provides detection of fires as well as the detection of developing problems such as unusual odors and noise that may precede a fire. Therefore, there is little safety significance to this event.

Corrective Action to Prevent Recurrence:

The plastic sheeting was removed by 1645 hours on October 11, 1989, allowing the hourly fire watch to satisfy the remaining applicable action statement.

This event has been reviewed with the Modification Coordinators and Supervisors. The need to recognize and question situations for their potential impact on equipment and system operability was stressed.

Failure Data:

This is the first report of fire detectors being disabled due to personnel oversight when installing temporary barriers.

REPORT NO.: NP33-89-016

PCAO NO.: 89-0506