



EDISON PLAZA
300 MADISON AVENUE
TOLEDO, OHIO 43652-0001

March 14, 1990

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

Gentlemen:

LER 90-003
Davis-Besse Nuclear Power Station, Unit No. 1
Date of Occurrence - February 12, 1990

Enclosed please find Licensee Event Report 90-003 which is being written to provide 30 days notification of the subject occurrence. This report is being submitted in accordance with 10CFR50.73(a)(2)(i).

Yours truly,

A handwritten signature in cursive script, appearing to read 'Louis F. Storz'.

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 6 1 OF 0 3										PAGE (3) 1 OF 0 3		
TITLE (4) Entry Into Mode 6 Refueling Without Audible Source Range Indication																						
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)								
0 2	1 2	9 0	9 0	0 0 3	0 0	0 3	1 4	9 0						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)																				
6		20.402(b)				20.406(a)				50.73(a)(2)(iv)				73.71(b)								
POWER LEVEL (10)		20.406(a)(1)(i)				50.36(a)(1)				50.73(a)(2)(v)				73.71(a)								
0 0 0		20.406(a)(1)(ii)				50.36(a)(2)				50.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)								
		20.406(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(viii)(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)(x)												
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												
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)

On February 12, 1990, at 0123 hours, the Station entered Mode 6, Refueling, without operable audible source range indication. This is a condition prohibited by Technical Specification 3.0.4. It was recognized by the operators about an hour later while reviewing Technical Specification requirements for refueling operations. The action statement of Technical Specification 3.9.2 was immediately invoked. The action statement was not violated as there had been no operations involving core alterations or positive reactivity changes. The cause was personnel error. The licensed operator N/A'd the step on the Mode 6 checklist of DB-PN-06900, Pre-Startup Checklist Procedure, because he thought that Technical Specification 3.9.2 was required only for core alterations and not Mode 6. Subsequent reviews by others failed to correct this mistake. The original out-of-core source range detection channels were operable, however, these channels do not provide an audible source range indication. The functional tests (DB-MI-03455 and 03456) for the new Gamma Metrics detection channel, which supplies the audible indication, were completed at 1430 hours on February 12, 1990. The last open MWO (2-84-0116-25) for the modification that installed the Gamma Metrics was closed on February 17, 1990, and the station exited the action statement of Technical Specification 3.9.2. The individual who statused the item N/A was counseled. Additionally, all licensed individuals will be required to review this incident as part of their required reading.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104
EXPIRES 8/31/00

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Davis-Besse Unit No. 1	0500034690	—	003	—	00	2 OF 3

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

Description of Occurrence:

On February 12, 1990, at approximately 0230 hours, while reviewing Technical Specification requirements for refueling operations, the Control Room operators recognized that Mode 6, Refueling, was entered without an operable audible source range indication (IG). Mode 6 was entered at 0123 hours on February 12, 1990, when the first Reactor Vessel Head bolt was detensioned. The audible source range indication is required by Technical Specification 3.9.2 and is applicable in Mode 6. Entry into Mode 6 without audible source range indication is a condition prohibited by Technical Specifications. There were no operations involving core alterations or positive reactivity changes. However, entry into Mode 6 is not allowed (per Technical Specification 3.0.4) without meeting the Limiting Condition for Operation.

The event is reportable under 10CFR50.73(a)(2)(i) as a condition prohibited by Technical Specifications.

Apparent Cause of Occurrence:

The cause was personnel error. Technical Specification 3.9.2 was statused incorrectly as not applicable for entry into Mode 6. The individuals assumed that this was a requirement only for core alterations and failed to properly reconcile this assumption with the Technical Specifications.

Analysis of Occurrence:

At the time Mode 6 was declared, Reactor Coolant System pressure was at 0 psig and temperature was at 105°F. There were no core alterations or positive reactivity changes in progress. Source range indication was still available via the original out-of-core source range indication channels, whose surveillance tests were current. The basis for the Technical Specification requirement is to ensure redundant monitoring capability is available to detect changes in the reactivity condition of the core. Not having an operable audible source range indication under these conditions presented no safety concerns.

Corrective Actions:

The individual who statused the item N/A was counseled on not making assumptions about Surveillance Requirements. On-shift supervising personnel were counseled on this event and on the need to make safe, conservative decisions. They were also counseled on the need to review Technical Specifications on a continuing basis. All licensed individuals will review this incident as part of their required reading.

An evaluation using the Human Performance Evaluation System (HPES) is ongoing relative to the personnel error, and the results will be addressed via the Station's Potential Condition Adverse To Quality (PCAQ) reporting process.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Davis-Besse Unit No. 1	0500034690	—	003	—	00	03	OF 03

TEXT (If more space is required, use additional NRC Form 388A's) (17)

The functional tests (DB-MI-03455 and 03456) of the two Gamma Metrics detection channels were completed at 1430 hours on February 12, 1990. When the last open maintenance work order (2-84-0116-25) for these channels was signed off, the station exited the action statement of Technical Specification 3.9.2 at 0600 hours on February 17, 1990. No core alterations occurred until after this date.

Failure Data:

A previous event where an entry was made into a mode without all of the surveillance requirements being satisfied was reported in LER 89-001. In that event, a test was statused as N/A because it could not be performed with the plant's existing conditions. The test required full power operation. The cause and corrective actions for the event reported in LER 89-001 were not applicable to this event.

REPORT NO.: NF33-90-004PCAO NO.: 90-0088