

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Davis-Besse Unit 1										DOCKET NUMBER (2) 0 5 0 0 0 3 4 6 1 OF 0 2										PAGE (3) 1 OF 0 2																																																																				
TITLE (4) Safety Features Actuation System Testing of High Pressure Injection Valves																																																																																								
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)																																																
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OPERATING MODE (9) 5									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)									20.405(c)									50.73(a)(2)(iv)									73.71(b)																																																				
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NAME Jim R. Albert, System Engineering																				TELEPHONE NUMBER 4 1 9 2 4 9 - 5 0 0 0																																																																				
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																																																																																								
CAUSE		SYSTEM		COMPONENT		MANUFACTURER		REPORTABLE TO NPD				CAUSE		SYSTEM		COMPONENT		MANUFACTURER		REPORTABLE TO NPD																																																																				
SUPPLEMENTAL REPORT EXPECTED (14)																				EXPECTED SUBMISSION DATE (15)										MONTH DAY YEAR																																																										
YES (If yes, complete EXPECTED SUBMISSION DATE)																				X NO																																																																				

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

During the review of the High Pressure Injection (HPI) System as part of the System Review and Test Program committed to the NRC in the Course of Action Report (Serial No. 1182), it was determined that current testing does not actuate HPI valves HP-2A, HP-2B, HP-2C, and HP-2D from a Safety Features Actuation System (SFAS) test signal, but uses only Control Room handswitches. The actuation of these valves from an SFAS signal is required for Technical Specification 4.5.2.e.1.

SFAS Logic is covered in existing tests, but the ability of the valves to actuate from the SFAS Logic output is not currently verified. ST 5031.07, SFAS 18 Month Test, has been modified to incorporate this testing. This test will be performed prior to restart.

This is being reported per 10CFR 50.73(a)(2)(v) as a procedure inadequacy that could have allowed a failure in a safety system to go undetected which could have prevented it from fulfilling its intended safety function.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

FACILITY NAME (1) Davis-Besse Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 3 4 6 8 6 — 0 0 4 — 0 0 0 2 OF 0 2				LER NUMBER (6)			PAGE (3)		
					YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

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

Description of Occurrence: During the review of the High Pressure Injection System, HPI, (BQ) Testing, it was determined that the injection flow path valves HP-2A, HP-2B, HP-2C, and HP-2D were not being tested to verify that the valves actuate to their safety features, open, position on a Safety Features Actuation System, SFAS, (JE) Test signal. This testing is required by Technical Specification 4.5.2.e.1. ST 5031.07, Integrated SFAS Test, currently strokes these valves with the Control Room handswitches only. Although SFAS Logic is tested in ST 5031.07, and in ST 5031.01, SFAS Monthly, the valves do not receive a periodic actuation from the SFAS Logic directly.

This is being reported per 10CFR50.73(a)(2)(v) as a procedure inadequacy that could have allowed a failure in a safety system to go undetected which could have prevented it from fulfilling its intended safety function.

Designation of Apparent Cause of Occurrence: The cause was the lack of an adequate technical review of the procedures that were written to meet Technical Specification Surveillance Requirements. A detailed review and mapping had not been done since original startup to ensure all parts of the system were encompassed by testing.

Although these valves are stroked to verify they operate, and SFAS Logic is tested in monthly and refueling tests to verify that it functions, these valves were not actuated from an SFAS Logic output signal.

Analysis of Occurrence: As proven by current testing, valves can be stroked manually. In addition, testing includes all components required for actuation. The testing currently performed is not deficient by exclusion of components, but rather is deficient in not testing components together as functional units.

Preoperational testing was performed on these valves utilizing SFAS test signals.

Corrective Action: ST 5031.07 has been modified as part of a major modification to resolve this deficiency. This test will be run prior to plant restart.

The System Review and Test Program, initiated since the June 9, 1985 event, is performing a detailed technical review of selected systems and associated testing in order to find any other existing deficiencies.

A Systems Engineering group is being formed with individuals who will be technical experts on plant systems. Once this group is trained and functional, they will review all changes to Surveillance Test procedures to ensure compliance with Technical Specifications.

This effort will also be complemented by the Qualified Reviewer Program which is being initiated.

Failure Data: Test deficiencies in other systems were reported in NP-33-85-22 (LER 85-018), NP-33-85-30 (LER 85-021), and NP-33-85-33 (LER 85-022).

REPORT NO: NP-33-85-39

DVR NO(S): 85-188



January 13, 1986

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File: RR2 (NP-33-85-39)

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

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Gentlemen:

LER No. 86-004
Davis-Besse Nuclear Power Station Unit 1
Date of Occurrence: December 14, 1985

Enclosed is Licensee Event Report 86-004 which is being submitted in accordance with 10CFR50.73, to provide 30 day written notification of the subject occurrence.

Yours truly,

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

LFS/syc

Enclosure

cc: Mr. James G. Keppler,
Regional Administrator
USNRC Region III

Mr. Walt Rogers
DB-1 NRC Resident Inspector

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