

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Davis-Besse Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 3 4 6	PAGE (3) 1 OF 0 3
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TITLE (4)
Lack of SFAS Stroke Testing of DH Pump Suction 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)
0 4	2 3	8 6	8 6	0 2 3	0 0	0 5	2 3	8 6		0 5 0 0 0

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 1 0 1 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 20.406(c)	<input type="checkbox"/> 50.36(e)(1)	<input type="checkbox"/> 50.36 (2)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> 50.73(a)(2)(ix)	<input type="checkbox"/> 73.71(b)	<input type="checkbox"/> 73.71(e)	<input type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 366A)

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
NAME	AREA CODE		
Carl Berger, Extension 4116	4 1 9	2 4 9 - 5 1 0 1 0	

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)

During a review of testing on the Decay Heat Removal/Low Pressure Injection System (DHR), it was determined that DHR pump suction valves DH2733 and DH2734 were not being tested from a Safety Features Actuation System (SFAS) signal. Actuation of these valves by SFAS is required by Technical Specification 4.5.2.e.1. These valves are normally maintained in their safety position (open) during plant operation.

The cause of this event was a lack of adequate technical review of the procedures written to meet Technical Specification Surveillance Requirements. The existing surveillance testing did not stroke DH2733 and DH2734 from an SFAS initiated signal. The Integrated SFAS Test has been converted into a Test Procedure, TP 850.19 and modified to include testing of DH2733 and DH2734. The TP will be performed this outage prior to unit restart. Subsequently, ST 5031.07 will be revised for use in future outages.

This is reported per 10CFR50.73(a)(2)(i)(C) as a deviation from plant Technical Specifications.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

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

Description of Occurrence:

While conducting a systematic review of the adequacy of testing on the Decay Heat Removal/Low Pressure Injection System, DHR, (BP) it was determined that DHR pumps suction valves DH2733 and DH2734 were not being tested from a safety injection signal. These valves receive confirmatory open signals from the Safety Features Actaion System, SFAS, (JE) to ensure the pumps will be aligned to a source of borated water in the event of a LOCA. Technical Specification 4.5.2.e.1 required verification that each automatic valve in the system actuates to its correct position on a safety injection test signal at least once per 18 months. The Integrated SFAS 18 Month Surveillance Test Procedure, ST 5031.07, has been performed with DH2733 and DH2734 initially open. Monthly testing is conducted to verify operability of the SFAS logic and output modules. However, this test does not include exercising actuated equipment.

This occurrence is being reported per 10CFR50.73(a)(2)(i)(C) as a deviation from the plant Technical Specifications.

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. Additionally, detailed review and mapping had not been done since original startup to ensure all parts of the system were encompassed by testing.

Analysis of Occurrence:

During Modes 1, 2, and 3, DH2733 and DH2734 are maintained in the open position. In Mode 4, the train that is required to meet the Low Pressure Injection (LPI) Technical Specification will have its respective suction valve DH2733 or DH2734 maintained open. No reliance is placed on the ability of these valves to automatically open in response to an SFAS signal since their opening stroke time exceeds the required response time of the DHR System. DH2733 and DH2734 have been successfully stroked quarterly using their manual actuation control switches. With either valve closed in Modes 1-4, the associated LPI train is declared inoperable.

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

Corrective Action:

The Integrated SFAS Surveillance Test, ST 5031.07, will be performed this outage as procedure TP 850.19 in support of the restart testing program. This procedure incorporates SFAS testing of DH2733 and DH2734 and will be performed prior to restart. ST 5031.07 will be similarly modified by December 31, 1986.

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 has been formed with individuals who will technically follow plant systems. This group's responsibilities include review of Surveillance Test procedures to ensure compliance with Technical Specifications.

This effort will also be complemented by Qualified Reviewer Program which has been initiated to provide additional technical review of station procedures.

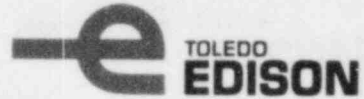
Since the ongoing reviews have shown five previous similar problems, a review of Technical Specification required testing will be conducted in parallel to find any other acceptance criteria that may have been omitted. This review will be completed prior to entering Mode 1.

Failure Data:

Test deficiencies in other systems were reported in NP-33-85-22 (LER 85-018), NP-33-85-30 (LER 85-021), NP-33-85-33 (LER 85-022) and NP-33-85-39 (LER 86-004).

REPORT NO: NP-33-86-27

DVR NO(s): 86-089



May 23, 1986

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

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

Gentlemen:

LER No. 86-023
Davis-Besse Nuclear Power Station Unit No. 1
Date of Occurrence April 23, 1986

Enclosed is Licensee Event Report 86-023 which is being submitted in accordance with 10CFR50.73, to provide 30 day written notification of the subject occurrence.

Yours truly,

A handwritten signature in cursive script that reads 'Louis F. Storz'.

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

LFS/ed

Enclosure

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

Mr. Paul Byron
DB-1 NRC Resident Inspector

*IEU
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