

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	
TITLE (4) Seismic Qualification, Domestic Water Line in Battery Rooms A & B															
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 3	2 1	8 6	8 6	0 1 5	0 0	0 4	1 8	8 6					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)													
5		20.402(b)				20.405(a)				50.73(a)(2)(iv)				73.71(b)	
POWER LEVEL (10)		20.405(a)(1)(i)				50.36(a)(1)				50.73(a)(2)(v)				73.71(a)	
0 0 1 0		20.405(a)(1)(ii)				50.36(a)(2)				50.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 388A)	
		20.405(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(vii)(A)					
		20.405(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(vii)(B)					
		20.405(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(x)					
LICENSEE CONTACT FOR THIS LER (12)															
NAME P. Straube										TELEPHONE NUMBER AREA CODE 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 NRC		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC					
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)

The domestic water lines (1"-JEE) servicing the shower eye washes in Battery Rooms A and B were found to not be seismically supported. This could potentially impact the safety related battery chargers in these rooms during a seismic event. These lines will be removed. Portable eye wash station will be used in the rooms.

This finding is reportable per 10CFR50.73(a)(2)(ii)(B) as a condition outside the design basis. The Updated Safety Analysis Report (USAR) says that no safety-related equipment would be affected by a domestic water line rupture.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)										PAGE (3)	
		YEAR		SEQUENTIAL NUMBER				REVISION NUMBER					
Davis-Besse Unit 1	0500034686	-	0	1	5	-	0	0	0	2	OF	0	3

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

Description of Occurrence:

The NRC resident inspector raised the question of whether the domestic water (KK) lines running in the Auxiliary Building (NF) into the station battery (EF) rooms were designed and installed in compliance with the Updated Safety Analysis Report (USAR). The specific lines in question are those that supply water to the eye wash/emergency showers in the station battery rooms. These lines are supplied from the Turbine Building (NM) header and pass above the battery chargers (EF) before entering the battery room. The USAR indicates that no safety-related equipment would be affected by a domestic water system rupture. An engineering evaluation of the as built configuration determined that the lines were not designed as seismic category I and therefore could be subject to a rupture during a seismic event.

This finding is reportable per 10CFR50.73(a)(2)(ii)(B) as a condition outside the design basis of the plant.

Designation of Apparent Cause of Occurrence:

The cause of this finding was the failure to recognize during the design that these otherwise non-seismic domestic water lines ran over the top of the seismic category I station battery chargers. With these lines in this configuration these domestic water lines should have also been designed as seismic category I. This would have assured the integrity of the lines during a seismic event.

The root cause was the lack of an adequate engineering review of the design.

Analysis of Occurrence:

A rupture of the non-seismic domestic water lines above the battery chargers could have caused the failure of the battery chargers. The failure of the battery chargers should not prevent the station batteries from supplying the designed loads. The batteries should supply selected loads for approximately one (1) hour. A swing charger could be manually connected to either set of batteries in each room should the normal charger be damaged.

Corrective Action:

The domestic water lines to the emergency showers in the battery rooms were isolated and drained from outside the Auxiliary Building pending completion of the engineering evaluation.

Engineering analysis has not been able to seismically qualify these domestic water lines in their present configuration.

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 -	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

These domestic water lines will be removed. Portable eye wash stations will be used in the battery rooms. These lines are expected to be removed by June 1, 1986.

The changes to the Davis Besse management organization which included the expansion of the engineering department on site and the creation of a Systems Engineering Group, will improve the engineering review of plant changes and prevent this type of oversight.

Further development of system descriptions with detailed design bases and hazards review is being accomplished as part of the Configuration Management Program for Davis Besse.

Failure Data:

This is the first report where the need for seismically designed piping system had been overlooked.



April 18, 1986

Log No. KA86-122
File: RR 2 (NP-33-86-09)

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

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

Gentlemen:

LER No. 86-015
Davis-Besse Nuclear Power Station Unit 1
Date of Occurrence: March 21, 1986

Enclosed is Licensee Event Report 86-015 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/ed

Enclosure

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

Mr. Paul Byron
DB-1 NRC Resident Inspector

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11