TOLEDO EDISON
A Centerior Energy Company

EDISON PLAZA
300 MADISON AVENUE
TOLEDO, OHIO 43652-0001

NP-33-95-002
AB-95-0035

Docket No. 50-346

License No. NPF-3

October 6, 1995

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

Gentlemen:

LER 95-002
Davis-Besse Nuclear Power Station, Unit No. 1
Date of Occurrence - September 6, 1995

Enclosed please find Licensee Event Report 95-002, which is being submitted to provide 30 days written notification of the subject occurrence. This LER is being submitted in accordance with 10 CFR 50.73(a)(2)(i)(B).

Very truly yours,

John K. Wood

John K. Wood
Plant Manager
Davis-Besse Nuclear Power Station

JKW/eld

Enclosure

cc: Mr. H. J. Miller
Regional Administrator
USNRC Region III

Mr. Stan Stasek
DB-1 NRC Sr. Resident Inspector

Utility Radiological Safety Board

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NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Davis-Besse Unit Number 1	05000-346	1 OF 04

TITLE (4)
Terminal Nuts Missing From Power Supply Leads in Cabinet C3629

EVENT DATE (5)			LER NUMBER (6)			REPORT NUMBER (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
										05000
09	06	95	95	-- 002 --	00	10	06	95	FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)					
POWER LEVEL (10)	100	20.402(b)		20.405(c)		50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)	OTHER
		20.405(a)(1)(iii)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Andrew V. Antrassian, Engineer - Licensing	(419) 321-7908

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
YES (If yes, complete EXPECTED SUBMISSION DATE)	X	NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On September 6, 1995, with the plant at approximately 100 percent power, it was discovered that all six post nuts were missing from a terminal strip in cabinet C3629. The terminal strip provides power to indicating equipment which includes Train/Loop 2 Technical Specification (TS) related Post Accident Monitoring System (PAMS) and Remote Shutdown Monitoring System (RSMS) instrumentation.

This nonconforming condition rendered the affected equipment technically inoperable because qualification could not be assured following a seismic event. Since this condition is believed to have existed for greater than the 30 days allowed by TS for inoperable PAMS and RSMS instrumentation, this condition is being reported as a condition prohibited by TS under 10CFR50.73(a)(2)(i)(B).

The apparent cause of this condition is considered an isolated wiring error. Terminal post nuts were verified in place for associated Train/Loop 1 instrumentation. Terminal post nuts were installed on the terminal strip in cabinet C3629. This work was completed on September 6, 1995.

Description of Occurrence:

On September 6, 1995, with the plant in Mode 1 at approximately 100 percent power, troubleshooting of the reactor coolant extended range pressure string was in progress under Maintenance Work Order (MWO) 7-95-0748-01. The pressure string had failed low and it was determined that the cause of the failure was that one of the two Foxboro power supplies in Post Accident Monitoring System (PAMS-IP) Essential Metering Cabinet C3629 had failed. During replacement of the failed power supply it was discovered that the terminal strip which provides power to both Foxboro power supplies in cabinet C3629 was missing all six terminal post nuts. The leads for the power supplies were held onto the terminal strip posts by ring lugs only.

Equipment which is powered by the two Foxboro power supplies in cabinet C3629 includes Technical Specification (TS) related indicating instruments PI6365A, FYIDH2A, FYI HP03A and FYI HP03B. These instruments correspond to the following instruments which are included in TS Table 3.3-10, Post Accident Monitoring Instrumentation:

- RC Loop Pressure Loop 2 (1 channel)
- High Pressure Injection Flow Train 2 (2 channels)
- Low Pressure Injection (DHR) Flow Train 2 (1 channel)

In addition, one of the affected Foxboro power supplies provides power to TS related indicating instrument PI6365A1. This instrument corresponds to the Reactor Coolant System Pressure instrument included in TS Table 3.3-9, Remote Shutdown Monitoring Instrumentation (JL).

The missing terminal nuts were determined to constitute a nonconforming condition in that the qualification of the affected equipment could not be assured following a seismic event. Based on the guidance provided in Generic Letter 91-18 on nonconforming conditions and operability, the affected equipment was considered technically inoperable while this condition existed.

A review of maintenance performed in cabinet C3629 was conducted. Based on this review, the nonconforming condition appears to have existed for greater than the 30 days allowed for inoperable instrumentation by TS 3.3.3.6 and TS 3.3.3.5.1. Consequently, this condition is being reported as a condition prohibited by TS under the provisions of 10CFR50.73(a)(2)(i)(B).

Apparent Cause of Occurrence:

The apparent cause of this condition is considered an isolated wiring error. Based on the review of maintenance performed in cabinet C3629, it appears likely that this condition may have existed since 1991 when work was performed on both Foxboro power supplies in cabinet C3629 under MWO 7-91-0308-02.

The terminal strip in question is located in the bottom of cabinet C3629 and is positioned underneath other equipment in the cabinet such that it is only visible from floor level. Consequently, discovery of this condition would not have been expected to occur during routine testing, maintenance, or inspections in cabinet C3629.

Analysis of Occurrence:

The affected equipment provides only indication functions with the exception of a Reactor Coolant System pressure input to Channel 2 of the Diverse Scram System (DSS). The DSS was installed to meet the requirements of 10CFR50.62 (the ATWS rule) and provides a diverse method of deenergizing control and safety rods in the event that the Reactor Protection System does not function as designed. However, the DSS is not required to function during or following a seismic event.

No other control functions of any plant equipment could have been affected by this condition. In the event of a seismic occurrence, plant operators could have used other indications or methods to determine high and low pressure injection flow, and reactor coolant pressure.

Monthly channel checks and eighteen month channel calibrations performed in accordance with TS 4.3.3.6 and TS 4.3.3.5.1 were satisfactorily completed for all the affected TS equipment for the entire duration that this condition is believed to have existed. The power supply lead ring lugs provided sufficient contact with the terminal posts to maintain electrical continuity in all plant conditions during this time period.

Based on the above, this condition is of minimal safety significance.

Corrective Actions:

When this condition was discovered, cabinet C3628 which contains similar indication instrumentation for Train/Loop 1 was immediately inspected. Terminal post nuts were found to be properly installed in this cabinet.

Potential Condition Adverse to Quality Report (PCAQR) 95-0749 was initiated on September 6, 1995, to document the missing terminal post nuts in cabinet C3629.

Terminal post nuts were installed on the terminal strip in cabinet C3629 on September 6, 1995. This work was accomplished under a continuation sheet for MWO 7-95-0748-01 and returned the affected instrumentation to operable status.

Based on the apparent cause of this condition being considered an isolated wiring error from the 1991 timeframe, no further corrective actions are deemed necessary at this time.

Failure Data:

No LERs in the previous three years have involved either wiring errors or nonconforming conditions related to seismic qualifications.

NP-33-95-002

PCAQR: 95-0749