NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Catawba Nuclear Station, Unit 1	0 5 0 0 0 4 1 3	1 OF 0 2

TITLE (4)

Installation Clearances Between the Vital I and C Batteries

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 5 0 0 0
0 4	2 3	8 5	8 5	— 0 2 9	— 0 0	0 5	2 3	8 5		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(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	0 1 0 0	20.405(a)(1)(i)	50.36(c)(1)	X 50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		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
	AREA CODE
Roger W. Ouellette, Assistant Engineer - Licensing	7 0 4 3 7 3 - 7 5 3 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
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On March 18, 1985 Duke Power Company was advised of a potential manufacturer's deficiency concerning installation clearances in the Vital Instrumentation and Control Power System batteries.

The manufacturer's (GNB Batteries, Inc.) drawings detailing installation of the seismic racks indicate that a minimum clearance of 1/8 inch must be maintained between the end cell and the end stringer. This is actually a typical dimension, and according to GNB the drawings should indicate a 0-1/4 inch clearance range. The batteries that were installed in accordance with the drawings had no documented maximum clearance requirement, and upon inspection it was noted that the end clearance exceeded 1/4 inch in several areas.

A temporary modification was initiated and permanent modification will be made to correct the spacing of the end cells.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Catawba Nuclear Station, Unit 1	0 5 0 0 0 4 1 3	8 5	— 0 2 9	— 0 0	0 2 OF 0 2

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

On March 15, 1985, the Catawba NRC Resident Inspector advised Duke Power of concerns related to installation clearances in the Vital Instrumentation and Control Power System batteries. The concerns were raised during a monthly inspection of Unit 1 facilities. Upon Duke Power's request GNB Batteries, Incorporated, advised that the maximum end stringer clearance should be 1/4 inch. A subsequent visual inspection revealed that some end clearances exceeded the new recommended limits set by the manufacturer. Failure criteria had not been established during seismic qualification for installations with clearances greater than 1/4 inch between the end cell and the end stringer.

Types NCX-750 and NCX-1200 battery banks are manufactured by GNB Batteries, Incorporated for use in the 125 VDC Vital Instrumentation and Control Power System application.

The manufacturer's drawings detailing installation of the seismic racks indicate that a minimum clearance of 1/8 inch must be maintained between the end cell and the end stringer. This is actually a typical dimension, and according to GNB the drawings should indicate a 0-1/4 inch clearance range. The batteries that were installed in accordance with the drawings had no documented maximum clearance requirement, and upon inspection it was noted that the end clearance exceeded 1/4 inch in several areas.

The possibility of battery failure during a seismic event exists in installations with excessive end clearances, due to impact of the end cell against the end stringer and resultant failure of cell jar integrity.

A temporary Modification was issued to install styrofoam spacers to fill the gaps per the manufacturer's recommendation. The installation drawings and the battery racks are in the process of permanent modification to conform with recommendations of the manufacturer. Drawings will be revised to agree with manufacturer recommendations and issued for implementation.

On April 23, 1985 the deficiency in documentation and installation was determined to be reportable pursuant to 10 CFR 50.73(a)(2)(v).

DUKE POWER COMPANY
P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
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May 23, 1985

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

Subject: Catawba Nuclear Station, Unit 1
Docket No. 50-413

Gentlemen:

Pursuant to 10 CFR 50.73 Section (a) (1) and (d), attached is Licensee Event Report 413/85-29 concerning installation clearances in the Vital Instrumentation and Control Power System batteries. This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,

H. B. Tucker

Hal B. Tucker

RWO:slb

Attachment

cc: Dr. J. Nelson Grace, Regional Administrator
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NRC Resident Inspector
Catawba Nuclear Station

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