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)
Point Beach Nuclear Plant	0 5 0 0 0 2 6 6	1 OF 0 4

TITLE (4)
Containment Isolation Valve Leakage in Excess of Tech Spec Limits

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 4	8 7	8 7	— 0 0 3	— 0 0	0 5	2 0	8 7		0 5 0 0 0
										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)			
POWER LEVEL (10)	1 0	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 (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii) X	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
C. W. Fay, Vice President - Nuclear Power	4 1 4 2 2 1 1 - 1 2 8 1 1

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	
X	C B	I S V	R 3 4 0								

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 April 24, 1987, during a type "C" leak rate test, a check valve for the nitrogen inlet to reactor coolant drain tank vent header (NG-1713) leak rate exceeded the containment leak rate allowed by Technical Specifications 15.4.4.II.B and III.B. The cause of the leakage through this valve apparently was foreign material in a normally unused portion of pipe fouling the valve seat.

The valve in question is a 1" check valve located in a nitrogen supply line, which is normally isolated during operation. Accordingly, there was no risk to public health and safety as a result of this valve potential leakage.

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

EVENT DESCRIPTION

On April 4, 1987, Unit 1 was shut down for its annual refueling. The total as-found leakage for the type "B" and "C" local leak rate testing exceeded 0.6 La when excessive leakage through the inlet check valve (NG-1713) for nitrogen to the vent header for the reactor coolant drain tank was found on April 24, 1987. The leak rate limit of 0.6 La is required by Technical Specifications 15.4.4.II.B and III.B.

Valve NG-1713 was tested according to procedure; however, the required test pressure of 65 psig could not be achieved in the test volume. An indicated test pressure of 31.5 psig was achieved while an indicated leak rate of 134,000 sccm existed. Note that this leak rate was not the actual leak rate which could have existed had the test volume been pressurized to 65 psig as required by the procedure. Therefore, in view of the test results, it is assumed that the leak rate of NG-1713 by itself violated the total leakage limits set forth in the Technical Specifications.

SYSTEM DESCRIPTIONS

NG-1713 is a 1-inch, 600-pound, carbon steel, spring-assisted lift check valve (print #C-464946 and #C-467994) manufactured by the Rockwell Edwards Corporation. This valve is located outside containment in the nitrogen supply line to the reactor coolant drain tank and pressurizer relief tank vent header. See the attached drawings of the test configuration for penetration #12 which contains the subject valve. The normal configuration for this penetration requires NG-1793 to be locked shut. During each refueling outage, two tests are performed on this penetration to confirm integrity. Drawing "1" attached shows the test configuration for testing NG-1786 and NG-1793 in parallel. Drawing "2" shows the configuration for the testing of NG-1787 and NG-1713 in parallel. The leak rate was confirmed to be from NG-1713 by using the configuration shown on Drawing "2" by checking for air escaping from the sensing line between Valve "A" and the regulator on Valve 1014.

GENERIC IMPLICATIONS

No generic implications have been discovered for this situation.

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

REPORTABILITY

This report is filed pursuant to 10 CFR 50.73(a)(2)(i), "Any operation or condition prohibited by the plant's Technical Specifications."

The Energy Industry Identification System component function identifier is ISV; system designation is CB.

CAUSE

The cause for the leakage through NG-1713 apparently was foreign material in the nitrogen piping. It should be noted that this valve performs no function during non-outage operations as NG-1793 is locked shut.

SAFETY ASSESSMENT

Operation of Unit 1 during the last fuel cycle posed no safety hazard to the employees of Point Beach Nuclear Plant or the general public.

NG-1793, a valve outside containment, is kept locked shut in series with NG-1713 (see attached print of containment penetration for valve locations). Since NG-1793 is locked shut and the historical leak rates for it are good (see table below), the safety impact of leakage through NG-1713 was minimal.

Valve Configuration	U1R11	U1R12	U1R13
1786 in parallel with 1793 (1713 in series)	19 sccm	8 sccm	11 sccm
1787 & 1713 in parallel	N/A	N/A	385 sccm

The NG-1786 and NG-1713/NG-1793 test has not been conducted since 1986 when drain valve 1793A was installed. As of the 1986 refueling outage, the type "C" test of penetration 12 has been of the two first off valves (NG-1786 and NG-1793) outside containment in parallel for one test and the two second off valves (NG-1787 and NG-1713) in parallel for the second test.

CORRECTIVE ACTIONS

The valve will be removed from service as a containment isolation valve by modification of the system. The pipe will be capped. This modification will be completed prior to the return of Unit 1 to operation.

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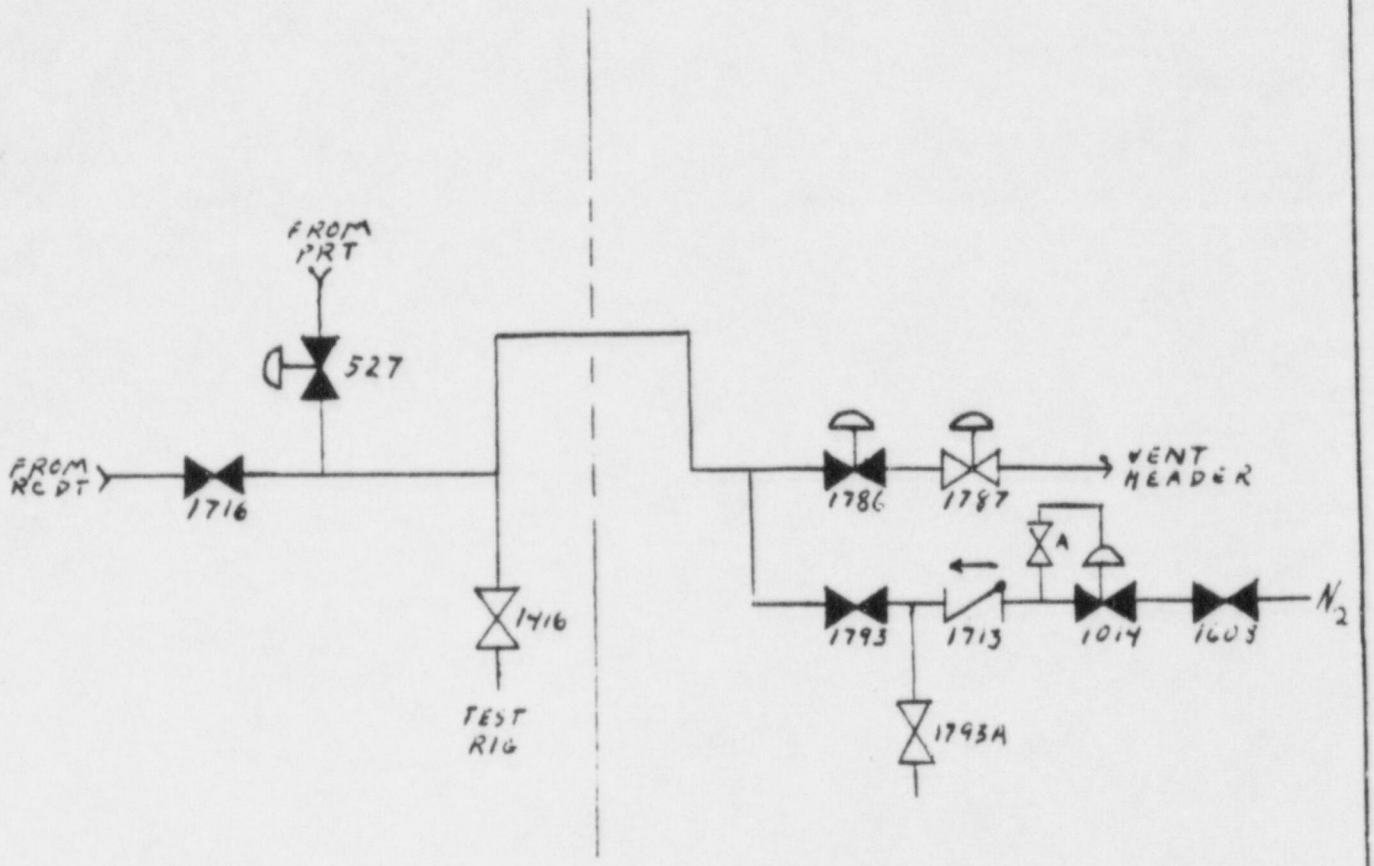
TEXT (If more space is required, use additional NRC Form 366A's) (17)

SIMILAR OCCURRENCES

Prior to the recent outage, as can be seen from the table in the Safety Assessment section above, NG-1713 in parallel with either NG-1786 or NG-1787 had acceptable leakage test results and therefore had shown no trends toward failure.

DRAWING "1"



TO TEST VALVES 1786 AND 1793; Shut valves; 1793, 1716, 527, 1786, 1608. Open valves 1787, 1416, and 1793A.

Point Beach Nuclear Plant

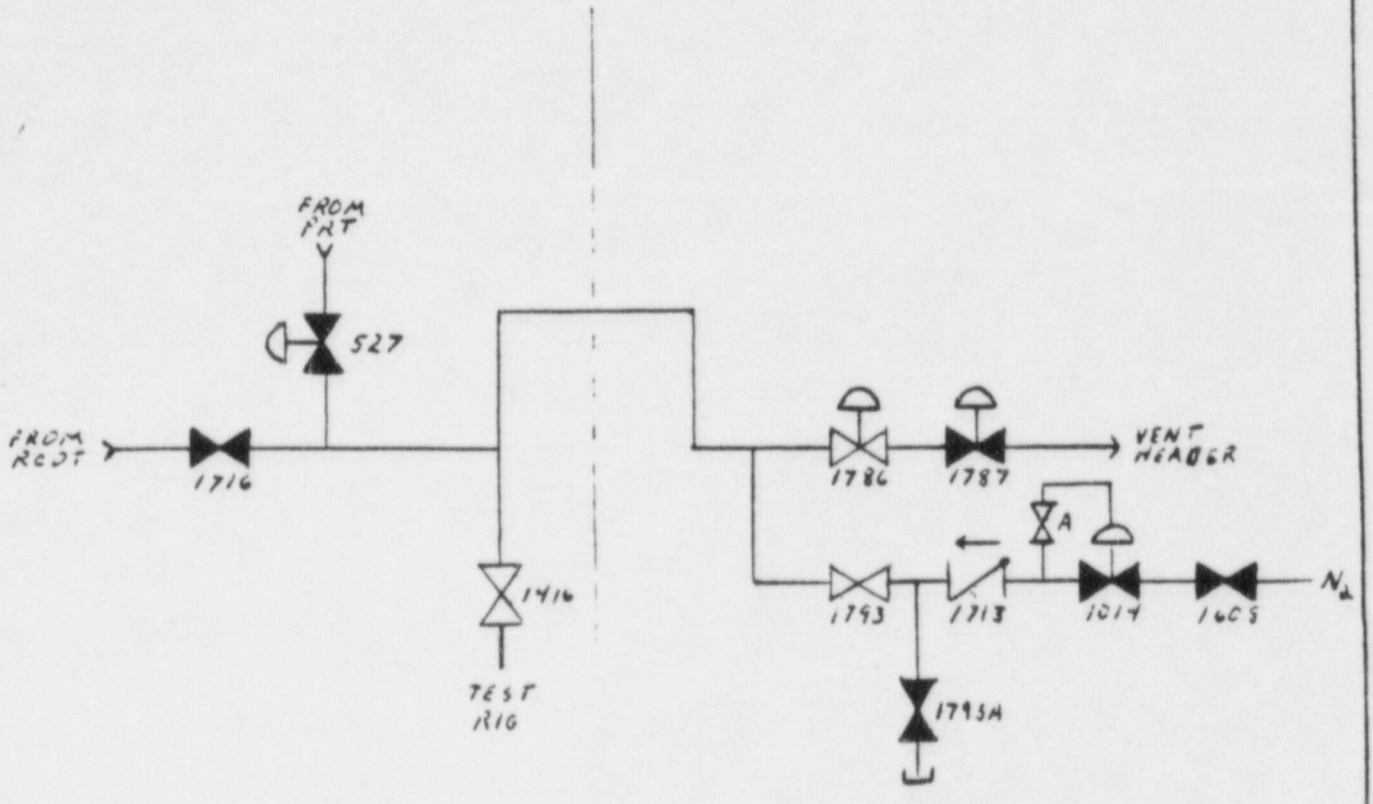
SHOWING Penetration #12C

LOCATION Pipeway #2

DRAWN BY cac. DATE 5-15-86

DRAWING NO B-IVLT-12C-P

DRAWING "2"



TO TEST VALVES 1787 AND 1713: Shut valves; 1793A, 1716, 527, 1787, 1608. Open valves 1416, 1786 and 1793. Disconnect sensing line between valve "A" and regulator. Open valve "A."

Point Beach Nuclear Plant

SHOWING Penetration #12C

LOCATION Pipeway #2

DRAWN BY Cac DATE 5-15-86

DRAWING NO B-IVLT-12C-S

Wisconsin Electric POWER COMPANY
231 W. MICHIGAN, P.O. BOX 2046, MILWAUKEE, WI 53201

(414) 221-2345

VPNPD-87-212
NRC-87-055

May 22, 1987

U. S. NUCLEAR REGULATORY COMMISSION
Document Control Desk
Washington, D. C. 20555

Gentlemen:

DOCKET 50-266
LICENSEE EVENT REPORT 87-003-00
CONTAINMENT ISOLATION VALVE LEAKAGE IN
EXCESS OF TECHNICAL SPECIFICATION LIMITS
POINT BEACH NUCLEAR PLANT, UNIT 1

Enclosed is Licensee Event Report 87-003-00 for Point Beach Nuclear Plant Unit 1 detailing the discovery of a containment isolation valve with a Type "C" leak rate in excess of that allowed by Technical Specifications.

LER-87-003-00 is filed pursuant to 10 CFR 50.73(a)(2)(i), "Any operation or condition prohibited by the plant's Technical Specifications."

If you have any questions, please do not hesitate to contact us.

Very truly yours,

C. W. Fay
Vice President
Nuclear Power

Enclosure

Copies to NRC Resident Inspector
NRC Regional Administrator, Region III

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