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VPNPD-95-104

December 20, 1995

Document Control Desk
US NUCLEAR REGULATORY COMMISSION
Mail Station P1-137
Washington, DC 20555

Ladies/Gentlemen:

DOCKET 50-301
LICENSEE EVENT REPORT 95-006-00
PORV POST-MAINTENANCE TESTING
NOT PERFORMED PRIOR TO ESTABLISHING LTOP
POINT BEACH NUCLEAR PLANT, UNIT 2

Enclosed is Licensee Event Report 95-006-00 for Point Beach Nuclear Plant, Unit 2. This report is provided in accordance with 10 CFR 50.73(a)(2)(i), "Any operation or condition prohibited by the plant's Technical Specifications."

This report describes the Unit 2 event that occurred during November 25-27, 1995, in which a pressurizer power operated relief valve (PORV) was not post-maintenance tested prior to establishing the conditions in which it was required to be operable by the Technical Specifications.

Please contact us if any further information is required.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bob Link', is written over a faint circular stamp.

Bob Link
Vice President
Nuclear Power

CAC

Enclosure

cc: NRC Resident Inspector
NRC Regional Administrator, Region III

9512260284 951220
PDR ADOCK 05000301
S PDR

JE22

LICENSEE EVENT REPORT (LER)

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

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20565-0001, AND TO THE PAPERWORK REDUCTION PROJECT

FACILITY NAME (1) Point Beach Nuclear Plant, Unit 2	DOCKET NUMBER (2) 05000301	PAGE (3) 1 OF 4
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TITLE (4)
PORV Post-maintenance Testing Not Performed Prior to Establishing LTOP

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 NAME	DOCKET NUMBER
11	25	95	95	-- 006 --	00	12	20	95	FACILITY NAME	DOCKET NUMBER 05000
									FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9) N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more) (11)									
	20.2201(b)		20.2203(a)(2)(v)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)			
POWER LEVEL (10) 000	20.2203(a)(1)		20.2203(a)(3)(i)		50.73(a)(2)(ii)		50.73(a)(2)(x)			
	20.2203(a)(2)(i)		20.2203(a)(3)(iii)		50.73(a)(2)(iii)		73.71			
	20.2203(a)(2)(iii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER			
	20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below			
	20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)		or in NRC Form 366A			

LICENSEE CONTACT FOR THIS LER (12)

NAME Curtis A. Castell	TELEPHONE NUMBER (Include Area Code) (414) 221-2019
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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)		
YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO		MONTH	DAY	YEAR

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

On November 25, 1995, at 1513 hours, with Unit 2 in shutdown for refueling, work was initiated to place the reactor head back on the reactor vessel. The operators recognized that the reactor coolant system (RCS) was about to be closed and as required by Technical Specification 15.3.15 Low Temperature Over-Pressure protection (LTOP) was placed in-service. At about 0033 hours on November 27, it was discovered that one of the two Power Operated Relief Valves (PORV) being relied on for LTOP, had been repaired during the refueling outage and post-maintenance testing had not been performed. The other PORV was immediately opened, which allowed the RCS to be considered open and ended the Technical Specification requirement for LTOP protection. Post-maintenance testing of the PORV was completed, LTOP protection was returned to service, and the RCS was again closed. This event was caused by inadequate control of post-maintenance testing. Corrective actions to address the control of post-maintenance testing requirements will be determined as part of the completion of a root cause evaluation of this event.

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TEXT CONTINUATION

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

Event Description:

On November 25, 1995, at 1513 hours, with Unit 2 in shutdown for refueling, work was initiated to place the reactor head back on the reactor vessel. The procedure being used, RP-1B, "Recovery from Refueling," states that establishing Low Temperature Over-pressure (LTOP) protection may be needed if the RCS is being closed. The operators recognized that the installation of the reactor vessel head and associated bolting studs would close the RCS. Therefore, the operators placed LTOP protection in-service. Unbeknown to the operators, one of the two Power Operated Relief Valves (PORV) being relied on for LTOP, had been repaired during the refueling outage. Normally, post-maintenance testing would be performed prior to placing a PORV back in-service prior to establishing conditions in which it may be relied upon to perform a safety function. In this case, the post-maintenance testing had not been performed.

At about 0055 hours on November 27, 1995, a planner in the PBNP Work Control Center was in the process of informing the operators about various activities that needed to be performed. At that time, it was discovered that the post-maintenance test of the PORV had not been completed prior to the PORV being relied upon for LTOP protection. The other PORV was immediately opened, which allowed the RCS to be considered open and ended the Technical Specification requirement for LTOP protection.

At 0333 hours, post maintenance testing of the PORV was completed. At 0335 hours, LTOP protection was returned to service and the RCS was again closed.

The Technical Specifications (TS) that require LTOP Protection are contained in Technical Specifications Section 15.3.15, "Overpressure Mitigating System Operations." In particular, TS 15.3.15.A.1 states, "Except as specified in 15.3.15.A.2 below, the overpressurization mitigating system shall be operable whenever the reactor coolant system is not open to the atmosphere and the temperature is less than the minimum pressurization temperature for the inservice pressure test, as specified in Figure 15.3.1-1. Operability requirements are: a. Both pressurizer power operated relief valves operable at a setpoint of ≤ 425 psig."

TS 15.3.15.A.2 states that the requirements of 15.3.15.A.1 may be modified as follows, "With one PORV inoperable while the reactor coolant system temperature is $\leq 200^\circ\text{F}$, either restore the inoperable PORV to operable status within 24 hours, or depressurize and vent the reactor coolant system within a total of 32 hours." Approximately 34 hours had elapsed from the time LTOP protection was originally established to the time the RCS was depressurized and vented.

The completion of testing at 0033 hours on November 27, 1995, showed that the PORV was operable, but based on consideration of the work that was performed on the valve operator and the fact that the normal practice of

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

performing post-maintenance testing was not completed, a conservative determination that the PORV was not operable was made at the time of discovery. Therefore, it was judged that at the time of the discovery of the situation a Technical Specification violation had occurred.

Component and System Description:

The pressurizer power operate relief valves are used, (but are not required for safety analysis purposes) during normal power operation, for anticipatory overpressure protection of the RCS. The pressurizer safety relief valves are the safety-related protection for the RCS from overpressurization.

During shutdown conditions, LTOP protection is established as required by the Technical Specifications by enabling the PORVs to actuate at a setpoint of ≤ 425 psig. This protects the reactor vessel from situations that could lead to brittle fracture.

The two Pressurizer PORVs are Copes-Vulcan, air-operated, globe valves that require pneumatic pressure to open and spring return to the closed position.

The IEEE Standard 803A-1983 component identifier for this report is:

Pressure Control Valve PCV

Cause:

This event was caused by inadequate control of post-maintenance testing.

Corrective Action:

The immediate corrective actions for this event included: Establishment of Technical Specifications compliance by venting the RCS and verification that it was depressurized. Appropriate post-maintenance testing of the PORV was completed and the LTOP protection was returned to service.

Long term corrective actions to address the control of post-maintenance testing will be determined as part of the completion of a root cause evaluation of this event.

Reportability:

This event is being reported in accordance with the requirements of 10 CFR 50.73(a)(2)(i), "Any operation or condition prohibited by the plant's Technical Specifications."

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

Safety Assessment:

During shutdown conditions, LTOP protection is established as required by the Technical Specifications by enabling the PORVs to actuate at a setpoint of ≤ 425 psig. This protects the reactor vessel from situations that could lead to brittle fracture.

This report describes the situation in which appropriate post-maintenance testing was not performed prior to placing the nuclear plant in a condition where the PORV was needed to fulfill operability requirements per the PBNP Technical Specifications. The PORV was determined to be operable when the post-maintenance testing was completed.

Additionally, there are two PORVs available for redundant operation for LTOP protection. Therefore, based on the fact that the PORV was proven to be operable and that the redundant PORV was also available, Point Beach Nuclear Plant was maintained in a safe condition throughout this event. Appropriate protection of the reactor vessel against brittle failure was not diminished.

Similar Occurrences:

The common LER 266/93-008-00 describes a situation in which a service water isolation valve was not properly tested after maintenance.