Wisconsin Electric
A WISCONSIN ENERGY COMPANY

Point Beach Nuclear Plant
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NPL 2000-0128

March 11, 2000 10 CFR 50.73

Document Control Desk
U.S. NUCLEAR REGULATORY COMMISSION
Mail Station P1-137
Washington, D.C. 20555

Ladies/Gentlemen:

DOCKETS 50-266 AND 50-301
LICENSEE EVENT REPORT 2000-002-00
TECHNICAL SPECIFICATION SURVEILLANCE REQUIREMENT
TO VERIFY ECCS VALVE POSITION NOT FULLY IMPLEMENTED
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

Enclosed is Licensee Event Report 2000-002-00 for Point Beach Nuclear Plant, Units 1 and 2. This report is provided in accordance with 10 CFR 50.73(a)(2)(i)(B), as "Any operation or condition prohibited by the plant's Technical Specifications." This report describes the discovery during a routine system walk down and inspection that four maintenance valves in the ECCS system (two in each unit) were not locked closed or periodically checked in accordance with Technical Specification (TS) surveillance requirement 15.4.5.II.B.2, "Emergency Core Cooling System and Containment Spray System Tests."

New commitments in this event report are identified in the corrective action section by italics.

Please contact us if you require additional information concerning this report.

Sincerely,

A. J. Cayia
Manager,
Regulatory Services & Licensing

Enclosure

CWK/tat

cc: NRC Resident Inspector
NRC Regional Administrator
NRC Project Manager
PSCW
INPO Support Services

IE22

NRC FORM 366 (4-95) | U.S. NUCLEAR REGULATORY COMMISSION | APPROVED BY OMB NO. 3150-0104 EXPIRES 04/30/98

# 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: 50.0 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 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT

| FACILITY NAME (1) | DOCKET NUMBER (2) | PAGE (3) |
|---|---|---|
| Point Beach Nuclear Plant, Unit 1 | 05000266 | 1 of 4 |

**TITLE (4)**

Technical Specification Surveillance Requirement to Verify ECCS Valve Position Not Fully Implemented

| 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 |
| | | | | | | | | | Unit 2 | 05000301 |
| 02 | 10 | 2000 | 2000 | - 002 | - 00 | 03 | 11 | 2000 | FACILITY NAME | DOCKET NUMBER 05000 |

| OPERATING MODE (9) | N | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| POWER LEVEL (10) | 100 | | 20.2201(b) | | 20.2203(a)(2)(v) | X | 50.73(a)(2)(i) | | 50.73(a)(2)(viii) |
| | | | 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)(ii) | | 50.73(a)(2)(iii) | | 73.71 |
| | | | 20.2203(a)(2)(ii) | | 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 or in NRC Form 366A |
| | | | 20.2203(a)(2)(iv) | | 50.36(c)(2) | | 50.73(a)(2)(vii) | | |

**LICENSEE CONTACT FOR THIS LER (12)**

| NAME | TELEPHONE NUMBER (Include Area Code) |
|---|---|
| Charles Wm. Krause, Senior Regulatory Compliance Engineer | (920) 755-6809 |

**COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)**

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO EPIX | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO EPIX |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |

| 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)

During a system walk down and inspection at the Point Beach Nuclear Plant (PBNP), four valves were identified (two in each unit) that were not being periodically verified to be in the correct (shut) position as required by Technical Specification (TS) surveillance TS 15.4.5.II.B.2, "Emergency Core Cooling System and Containment Cooling System Tests." The valves were immediately checked and verified to be in their proper shut position. The valves were subsequently red locked in the shut position. Valves which are locked, sealed or otherwise secured in position are not required to be checked every 31 days. The safety impact of this missed surveillance was negligible. This event is reportable in accordance with 10 CFR 50.73(a)(2)(i).

| FACILITY NAME (1) | DOCKET NUMBER (2) | LER NUMBER (6) | | | PAGE (3) |
|---|---|---|---|---|---|
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | |
| Point Beach Nuclear Plant, Unit 1 | 05000266 | 2000 | - 002 | - 00 | 2 OF 4 |

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

## Event Description:

On February 10, 2000, at 1045 CST, the NRC Senior Resident Inspector brought to the attention of the licensee a concern that the surveillance of four small maintenance valves associated with the SI-850A and SI-850B hydraulic operated containment sump suction valves may not be occurring as required by the Technical Specifications. Specifically, Technical Specification (TS) 15.4.5.II.B.2 requires that the licensee verify the correct position of each manual, power operated, and automatic valve necessary to insure system operability in the emergency core cooling and containment spray systems, that is not locked, sealed, or otherwise secured in position, at least once every 31 days. The valves in question are located in parallel with the hydraulic valve operators in the containment tendon galleries. If these valves were left in the open position, and the SI-850 sump valves were required to be opened, the hydraulic fluid necessary to move the valve would bypass the valve operating cylinder. This would render the valve inoperable and would preclude the ability to shift ECCS to the containment sump recirculation mode. The inspector noted this condition while conducting a material condition inspection of the SI-850 valves and their valve operators during his investigation of an unrelated valve testing question.

A condition report (CR 00-0481) for this event was promptly initiated. TS 15.4.0.3 was entered for this apparent missed surveillance, which allows 24 hours to perform the required surveillance before declaring the system inoperable. An auxiliary operator and the ECCS system engineer investigated this condition and verified that all four bypass valves, two in each unit, were closed. This action was completed by 1335 on February 10, at which time full conformance with this TS surveillance was established. This event is reportable in accordance with 10 CFR 50.73(a)(2)(i) as a condition or operation prohibited by the Technical Specifications.

## Cause:

On May 6, 1999, PBNP submitted LER 266/1999-003-00 which discussed the discovery, while evaluating an industry operating experience, that the requirements of this specification, TS 15.4.5.II.B.2, were not being conservatively implemented. Prior to evaluating the industry operating experience report which prompted this investigation, our interpretation of TS 15.4.5.II.B.2 had been that the valves required to be verified in their correct position were only those valves in the direct ECCS or containment spray flow path which were not locked, sealed or otherwise secured in position. This TS interpretation had been in effect since this specification was issued with License Amendments 150 for Unit 1 and 154 for Unit 2 on August 25, 1994. The application of a broader interpretation of this requirement resulted in our subsequent identification of a number of additional valves which should be periodically verified under this requirement. These valves were identified in LER 266/1999-003-00 and were developed from a system engineer review and DBD engineering confirmation that the valves could potentially impact system operability if placed in the wrong position. The list of valves to evaluate was developed from a review of applicable P&ID drawings and operating checklists. The bypass valves identified in this event do not appear on any of these drawings or checklists and; therefore, were not identified in our previous review. The valves are not numbered and are provided only for hydraulic operator maintenance. A root cause evaluation has been initiated to establish why these valves were not previously identified as subject to the surveillance.

## Corrective Actions:

As discussed previously, the correct closed position of these four valves was promptly confirmed by 1345 on February 10, 2000

All four valves have been locked in the closed position which precludes the necessity for subsequent 31 day checks under this TS 15.4.5.II.B.2.

*These valves will be added to CL7A and CL7B, the "Safety Injection System Checklists" for both units. These checklists provide the valve lineup for the Safety Injection System for reactor critical operations and residual heat removal decay heat removal conditions.*

*A root cause evaluation will be conducted. Any additional corrective actions identified during this evaluation will be assigned to the appropriate work group and managed within the PBNP corrective action program.*

## Component and System Description:

The primary purpose of the safety injection (SI) system is to automatically deliver cooling water to the reactor core in the event of a loss-of-coolant accident (LOCA). This limits the fuel clad temperature and thereby ensures that the core will remain intact and in place with its heat transfer geometry preserved. The principal components of the safety injection system which provide emergency core cooling immediately following a loss of coolant accident are two accumulators (one for each loop), two safety injection (high head) pumps and the two residual heat removal (low head) pumps. During the recirculation phase of a postulated LOCA, the reactor coolant spilled from the RCS is located on the containment floor. Two independent and redundant ten inch lines are provided to recirculate that coolant from the containment sump B to the suction of the residual heat removal pumps. Each of those recirculation lines has two remotely operated valves. The first of these valves are the SI-850 A or B valves discussed in this report. The function of these valves is to open during the recirculation phase of safety injection. The hydraulic operators for these valves are located outside of containment in the tendon gallery. The second isolation valve in these lines is located in the Auxiliary Building. The SI system is described in more detail in Section 6.2 of the PBNP FSAR.

## Safety Assessment:

Although the requirement for verification of the position of these hydraulic operator maintenance valves every 31 days had not been satisfied in the past, the impact on the operability of these systems was not significant. All four valves were confirmed to be in their proper closed positions on February 10, 2000. Although not meeting the periodicity requirement of TS 15.4.5.II.B.2, the quarterly inservice testing of the safety injection valves in accordance with IT-40 for Unit 1 and IT-45 for Unit 2 includes stroking of the SI-850A and B valves. Had any of these hydraulic operator bypass valves been in the wrong (open) position, the respective SI-850 valve would not have stroked. These periodic tests provide reasonable assurance that the hydraulic operator bypass valve have not been inadvertently mis-positioned in the past. We have concluded; therefore, that the impact of this event on the health and safety of

the public and plant staff was negligible. This event did not constitute a safety system functional failure.

## System and Component Identifiers:

The Energy Industry Identification System component function identifier for each component/system referred to in this report are as follows:

| Component/System | Identifier |
|---|---|
| Containment Spray System | BE |
| Safety Injection System | BQ |
| Valve, Isolation | ISV |
| Hydraulic Control Unit | HCU |

## Similar Occurrences:

A review of recent LERs (past three years) identified the following event which involved the inadequate implementation of TS 15.4.5.II.B.2:

| LER NUMBER | Title |
|---|---|
| 266/1999-003-00 | Technical Specification Surveillance Requirement for ECCS and Containment Spray not Fully Implemented |