



Nuclear Management Company, LLC
Point Beach Nuclear Plant
6610 Nuclear Road
Two Rivers, WI 54241

NRC 2002-0083

10 CFR 50.48

September 26, 2002

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Dockets 50-266 and 50-301
Point Beach Nuclear Plant, Units 1 and 2
Reporting Of Fire Barriers Degraded For More Than Seven Days

Enclosed is a 30-day report for Point Beach Nuclear Plant (PBNP), Unit 1 and Unit 2. This report is provided in accordance with the PBNP Fire Protection Evaluation Report (FPER), Section 8.1.5. That section requires the submittal of a report to the U. S. Nuclear Regulatory Commission when degradation of fire protection systems or components exceeds the time listed in FPER Section 8.1.3. Paragraph C.1.b(4) of that section requires a report if an inoperable fire barrier is not restored to an operable status within a seven day period.

As discussed in the enclosure to this letter, several potential fire barrier degradations have recently been identified which involved two fire doors, a spancrete ceiling slab, and six penetration seals. The barriers containing these components have been conservatively declared to be degraded for a period exceeding seven days. Appropriate compensatory measures have been initiated and will continue until corrective actions, as discussed in the enclosure to this letter, are completed.

This report contains no new commitments.

If you have any questions concerning our plans, please contact Norm Hoefert at 920-755-7590.

Sincerely,



T. H. Taylor
Plant Manager

CWK/kmd

Enclosure

cc: NRC Regional Administrator
NRC Resident Inspector

NRC Project Manager
PSCW

A006

DEGRADED FIRE BARRIERS
30-DAY REPORT
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

Purpose

This report is submitted in accordance with the PBNP Fire Protection Evaluation Report (FPER) Section 8.1.5, "Reportability," which requires a report when specified fire protection features or equipment, including fire barriers and fire barrier components, are degraded or inoperable in excess of program requirements. As required by the FPER, this report includes a description of action(s) taken, or to be taken, the cause of the inoperability or degradation, and the plans and schedule for restoring the system to operable status.

The approved fire protection program described in the PBNP FPER, Section 8.1.1, "Applicability," specifies that fire protection components, which provide fire protection capability for equipment required for safe plant shutdown shall be operable whenever the equipment protected by the fire protection system is required to be operable. Fire barriers (Section 8.1.3.C) are included in the fire protection features identified in the FPER. PBNP Operations Manual procedure OM 3.27, "Control of Fire Protection and Appendix R Safe Shutdown Equipment," clarifies the requirement for fire barriers at Section 5.1.3. That procedure states that all fire barriers and fire barrier components (i.e. walls, floors and ceiling barriers, penetration seals, fire doors, fire dampers and electrical raceway fire barriers) protecting safe shutdown areas shall be operable. A fire barrier, penetration seal or other barrier component may be inoperable provided that:

- The immediate area on each side of the fire barrier is inspected to assure that potential fire hazards are minimized,
- Activities in the immediate area on each side of the fire barrier are restricted to that which is necessary for continued operation and to enable restoration of the barrier operability, and
- An hourly fire watch inspection shall be performed on each side of the fire barrier.

Degradation of AFW Pump Room Tunnel Ceiling Assembly

Description

During performance of Nuclear Oversight (NOS) Assessment 2002-003-3, NMC engineers identified that the auxiliary feedwater (AFW) Pump Room Tunnel spancrete ceiling slab has through openings along its width. This called into question the ceiling slab's 3-hour fire barrier requirement. This ceiling construction provides 2-hour Underwriters Laboratories (UL) fire resistance and 3-hour Wisconsin Administrative Code fire resistance, provided the heat transmission requirements of ASTM E-119 may be reduced to ½ the hourly rating. Because this barrier was constructed in accordance with the state building code, it appears that this conditional statement was satisfied. However, further evaluation of this assembly will be conducted to ensure that the above stated conditions were adequately met.

Immediate Actions Taken

In accordance with FPER 8.1.3.C.1.b and OM 3.27, Section 5.1.3, an hourly fire watch inspection will continue to be performed on each side of the fire barrier until the integrity of this barrier is restored or the barrier is determined to be adequate.

Plans and Schedule

A condition evaluation of this issue has been conducted, which identified the need for further detailed evaluation. This evaluation will involve review of the original design to ascertain compliance during the installation of this barrier. Additionally, the existing configuration will be evaluated to determine the level of protection provided. Based on these evaluations the spancrete ceiling assembly will be determined acceptable as-is or restored to the appropriate fire resistance. This detailed engineering evaluation and the appropriate corrective actions should be completed by the end of January 2003.

Degradation of Fire Doors 148 & 156

Description

During performance of Nuclear Oversight (NOS) Assessment 2002-003-3, NMC engineers identified that Class A (3-hr fire rated) doors 148 & 156 are equipped with window (lites) with a 1-hr fire rating. The presence of these lites in 3-hr fire rated doors degrades the integrity of the barrier within which they are installed.

Immediate Actions Taken

In accordance with FPER 8.1.3.C.1.b and OM 3.27, Section 5.1.3, an hourly fire watch inspection will continue to be performed on each side of the fire barrier until the integrity of this barrier is restored or the barrier is determined to be adequate.

Plans and Schedule

A condition evaluation of this issue has been conducted resulting in the need to replace the doors containing 1-hr fire rated lites with new doors containing 3-hr fire rated lites. Action to replace doors 148 and 156 is being conducted via work orders. This work should be completed by the end of February 2003.

Penetration Seals Identified with Documentation Deficiencies

Description

During performance of Nuclear Oversight (NOS) Assessment 2002-003-3 on Fire Protection (FP), supporting documentation for the qualification of six penetration seals selected during a plant walkdown could not be provided. The physical condition of the seals was good. There were no defects or damage observed on the seals selected. The designation and location of the questioned seals are as follows:

M-5-4-21-S10 (through transom above Door 261 at PAB el 26', east entrance)

M-0-41-F45 (Area/Zone AO1-B/187, near column lines G/11, el 26ft)

M-3-5-14-N7 (Area/Zone AO1-B/237, near column lines G/13, el 44ft)

M-7-4-45-C1 (Area/Zone AO3/152, el 8ft, through ceiling of Charging Pump cubicle)

M-7-3-5-W3 (A23/304, thru west wall of AFP Room, in SW corner)

M-7-3-5-W2 (A23/304, thru west wall of AFP Room, in SW corner)

As mentioned above, documentation concerning the fire penetration seals is less than adequate. An engineering analysis of each of these seals is planned to be conducted to identify the typical detail that was used for their installation and ascertain compliance with the detail parameters. Additional engineering analysis will be conducted and/or fire test documentation acquired as necessary to properly qualify these seals.

Immediate Actions Taken

In accordance with FPER 8.1.3.C.1.b and OM 3.27, Section 5.1.3, an hourly fire watch inspection will continue to be performed on each side of the fire barrier until reasonable assurance can be provided that the fire rated capability of these penetration seals can be established or the penetrations be otherwise demonstrated as operable.

Plans and Schedule

An engineering evaluation of these fire penetration seals is being conducted. Completion of this activity should be accomplished by the end of February 2003.