



Point Beach Nuclear Plant
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NPL 98-0098

February 1, 1998

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

Ladies/Gentlemen:

DOCKETS 50-266 AND 50-301
REPLY TO A NOTICE OF VIOLATION
NRC INSPECTION REPORTS 50-266/97010 AND 50-301/97010
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

In a letter from Mr. John A. Grobe dated September 15, 1997, the Nuclear Regulatory Commission forwarded the results of an inspection conducted by your staff at our Point Beach Nuclear Plant from May 19, 1997, through June 13, 1997. This inspection report included a Notice of Violation that identified two violations of NRC requirements.

In our response dated October 15, 1997, we did not agree that Violation 2 was a violation of NRC requirements. Violation 2 stated that a welding procedure specification used during our Unit 2 Steam Generator Replacement Project did not meet the provisions of QW-409.1 as delineated in ASME Section IX. Violation 2 noted that the welding procedure specification allowed welding to be performed with an increase in heat input over that which had been demonstrated through the Charpy impact testing of the qualification weld. Our October 15, 1997, response summarized recent ASME Main Committee and Section IX Subcommittee reviews and actions regarding QW-409.1 provisions, our interpretation of applicable Code requirements, and our basis for disputing the Violation 2.

On November 4, 1997, members of our staff participated in a conference call with NRC Region III personnel to further discuss Violation 2. This additional dialogue provided us a better understanding of the Nuclear Regulatory Commission's technical position and philosophy regarding the intent of QW-409.1. We continue to believe that a prevalent industry interpretation or broad consensus regarding the code compliant application of QW-409.1 does not exist. However, we understand the Commission's technical position and acknowledge that it represents a fundamentally sound interpretation, and accordingly, we accept the violation. We now agree that the example cited is a violation of NRC requirements as contained in 10 CFR 50, Appendix B, Criterion IX. Accordingly we are submitting the attached revised response to Violation 2.

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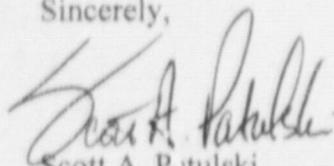
A subsidiary of Wisconsin Energy Corporation



IED 1/1

If you have any questions or require additional information regarding this response, please contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott A. Patulski". The signature is written in a cursive style with a large initial "S".

Scott A. Patulski
Site Vice President

Attachment

cc: NRC Regional Administrator
NRC Resident Inspector
NRC Project Manager
PSCW

DOCKETS 50-266 AND 50-301
REPLY TO A NOTICE OF VIOLATION
NRC INSPECTION REPORTS 50-266/97010 AND 50-301/97010
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

During an inspection conducted from May 19, 1997, through June 13, 1997, two violations of NRC requirements were identified. Inspection Reports 50-266/97010 and 50-301/97010 and the Notice of Violation transmitted to Wisconsin Electric on September 15, 1997, provide details regarding the violations. Wisconsin Electric submitted a response to the inspection report and enclosed Notice of Violation via a letter to the Nuclear Regulatory Commission dated October 15, 1997. In our response, we did not agree Violation 2 was an example of a violation of NRC requirements as contained in 10 CFR 50, Appendix B, Criterion IX.

Upon further review and as a result of additional dialogue between representatives of the Point Beach Nuclear Plant staff and the NRC inspectors, we now agree that Violation 2 is a violation of NRC requirements.

Accordingly, this revised response addresses Violation 2. In accordance with the instructions provided in the Notice, our reply to the alleged violation includes: (1) the reason for the violation, or if contested, the basis for disputing the violation; (2) corrective action taken; (3) corrective action to be taken to avoid further violations; and (4) the date when full compliance will be achieved.

Violation 2

"10 CFR 50, Appendix B, Criterion IX, "Control of Special Processes," requires, in part, that measures shall be established to assure that special processes, including welding, are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes, and standards.

ASME Section IX, 1995 Edition, requirement QW-409.1, as implemented by requirement QW-256, requires that "A change in the type of current or polarity, an increase in heat input, or an increase in volume of weld metal deposited per unit length of weld, [is not allowed] over that qualified."

Contrary to the above, the inspectors identified on June 13, 1997, that weld procedure WPS GT-SM/3.3-2 PB, Revision 1, did not meet the requirements of QW-409.1. The weld procedure allowed welding to be performed with an increase in heat input over that which had been demonstrated through Charpy impact testing of the qualification weld.

This is a Severity Level IV violation (Supplement 1)."

Response to Violation 2

We concur that Violation 2 is a violation of NRC requirements as characterized in the inspection report. The circumstances surrounding the event are as stated in Inspection Reports 50-266/97010 and 50-301/97010 and in our initial response to the Notice Of Violation dated October 15, 1997.

Reason for Violation

Wisconsin Electric and our Steam Generator Replacement Project construction contractor believed that welding procedure specification WPS GT-SM/3.3-2 PB and associated procedure qualification record PQR GT-SM/3.3-Q2 conformed to the requirements of the 1995 edition of ASME Section IX and the 1986 edition of ASME Section III, Subsection NB, regarding establishing the heat input as required by QW-409.1. The welding procedure specification and associated procedure qualification record were formulated and applied during our Unit 2 Steam Generator Replacement Project in what was thought to be in accordance with a common interpretation of the provisions QW-409.1 and accepted industry practices.

Recent reviews of QW-409.1 by the ASME Main Committee and the ASME Section IX Subcommittee demonstrate that a broad consensus regarding the application of the provisions of QW-409.1 has not been reached. It is apparent that technical experts both within and outside the ASME organization are not in agreement on the requirements for, or the practical implementation of, QW-409.1. We believe that the absence of consensus between industry, ASME, and NRC contributed to our nonconformance with the Code interpretation made by the Commission in support of this violation.

Additional background information regarding the recent reviews and actions of the ASME Main Committee and ASME Section IX Subcommittee are pertinent to the violation. Our understanding of these reviews and actions are summarized in the following paragraphs.

The concern raised by the NRC is similar to that raised by the author of Code Interpretation IX-92-69. This interpretation was initially received by ASME in January, 1992, and various parts were answered over the next several Code meetings. The main issue of controversy that remained unresolved regarded the location of impact test specimens relative to the various heat inputs that might occur at various locations in a test coupon joint.

In the May, 1993, meeting, the inquiry was approved by the Section IX Subcommittee, subject to the approval by the Main Committee. At the same meeting, proposed changes to ASME Section IX, QW-409.1 were also approved by the Section IX Subcommittee. These changes would have changed the article to read as follows:

"A change in the type of current or polarity, an increase in heat input, or an increase in volume of weld metal deposited per unit length of weld, over that qualified. The maximum heat input or volume of weld metal per unit length of weld qualified shall be determined from the weld passes with the nominal heat input or volume of weld metal per unit length or weld sampled by the impact test specimens."

Note that this wording is consistent with the concern raised by the NRC. It should be noted, though, that this interpretation generated significant controversy within both the ASME Section IX Subcommittee and the Main Committee. Although the interpretation and the proposed change were passed by the Section IX Subcommittee, three negative votes were noted, based primarily on the practical implementation of the proposed changes. Furthermore, the Main Committee registered fifteen negative votes, and both the interpretation and the proposed changes to QW-409.1 were voted down at the Main Committee level.

Because the interpretation was voted down at the Main Committee level, the interpretation should not have been published. Many older interpretations were not well received by the main Committee and should not be accepted carte blanche. Shortly after this interpretation was published, ASME changed their rules of operation such that interpretations are not published until the Main Committee has approved both the interpretation and any corresponding changes to the Code. Efforts are currently underway to review outstanding interpretations, and either incorporate or withdraw the interpretations. In fact, Interpretation IX-92-69 was reviewed during a September 16, 1997, meeting of the ASME Section IX Subcommittee. It is our understanding that the Section IX Subcommittee voted unanimously to withdraw the inquiry.

Wisconsin Electric consulted with two acknowledged ASME Code experts with the intent to facilitate closure of the issue. Both consultants arrived at the same conclusion; namely, that the subject procedure qualification record as originally performed, was in full compliance with the ASME Boiler and Pressure Vessel Code. Further, one of the consultants generated the request for additional review and subsequent recent withdrawal of Code Interpretation IX-92-69 by the ASME Section IX Subcommittee.

While we understand the Nuclear Regulatory Commission's technical position and acknowledge that the Commission's interpretation is fundamentally sound, the above summary demonstrates that a widely held understanding and consensus on this issue has not been achieved.

Corrective Actions Taken

The subject issue associated with WPS GT-SM/3.3-2 PB was initially identified by the NRC as an unresolved item in Inspection Report 50-301/96014 (DRS) dated February 7, 1997. It was noted in Inspection Report 50-301/96014 (DRS) that based upon discussions with the Office of Nuclear Reactor Regulation and the Office of Nuclear Regulatory Research technical staff and reviews of NDE results, the inspectors did not have a concern for the technical adequacy of the girth welds. A conference call with members of our staff and NRC representatives was conducted on May 7, 1997, to further review the issue and to discuss Code compliance interpretations. Although this conference call did not fully resolve the issue, Wisconsin Electric decided to take immediate conservative actions to assure that the Code compliant status of welds made by WPS GT-SM/3.3-2 PB would not be in doubt prior to the restart of Unit 2.

At the request of Wisconsin Electric, our Steam Generator Replacement Project construction contractor performed another qualification weld and additional associated Charpy impact testing. This additional qualification weld was performed to requalify the gas tungsten arc weld (GTAW)

portion of the qualification record. The additional qualification weld is documented as PQR GT/3.3-Q2 dated May 20, 1997. The requalification weld coupon used a heat input range that included the maximum listed on WPS GT-SM/3.3-2 PB. These maximum heat inputs were within the area where the impact testing coupon was taken to perform qualification testing of PQR GT/3.3-Q2.

Welding procedure qualification testing for PQR GT/3.3-Q2 was conducted in accordance with applicable ASME Section III and Section IX requirements, including Charpy impact testing. The results of the qualification testing for PQR GT/3.3-Q2 are documented in a test report dated May 27, 1997. The successful requalification satisfactorily demonstrated the code qualification of weld procedure WPS GT-SM/3.3-2 PB. Although performed by our construction contractor, this additional qualification weld and associated testing was performed under the scrutiny of a Wisconsin Electric Quality Assurance representative.

Wisconsin Electric directed our construction contractor to review all other impact tested procedure qualification records and related site specific welding procedure specifications prepared for our Unit 2 Steam Generator Replacement Project to assure that no other weld qualifications were at issue. Our contractor confirmed, in a letter dated June 6, 1997, that the violation issue did not apply to all other impact tested procedure qualification records which were used for permanently installed welds. For these other qualification records, the contractor confirmed that the highest heat input listed on the procedure qualification records were within the area where the Charpy impact testing coupon would have been taken and that heat input allowables for associated welding procedure specifications were at or below that allowed by the procedure qualification record.

Members of our engineering, maintenance and quality assurance staff that deal with welding issues and/or qualification have been notified of the issues surrounding this violation.

Date of Full Compliance

Full compliance with NRC requirements was achieved on May 27, 1997, upon completion of qualification weld PQR GT/3.3-Q2 and associated welding procedure qualification testing which satisfactorily demonstrated the code qualification of WPS GT-SM/3.3-2 PB. No additional actions are required to achieve full compliance with NRC requirements.