Wisconsin Electric
POWER COMPANY

231 W Michigan, P.O. Box 2046, Milwaukee, WI 53201-2046 (414) 221-2345

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

Gentlemen:

DOCKETS 50-266 AND 50-301
REPLY TO NOTICE OF VIOLATION
INSPECTION REPORTS 50-266/94011(DRP); 50-301/94011(DRP)
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

On July 20, 1994, the Nuclear Regulatory Commission forwarded to Wisconsin Electric Power Company, licensee for the Point Beach Nuclear Plant, the results of a routine safety inspection conducted by Messrs. J. Gadzala and A. McMurtray. This inspection report also included a Notice of Violation (NOV) containing one Severity Level IV violation.

We have reviewed this NOV and, pursuant to the provisions of 10 CFR 2.201, have prepared a written response of explanation concerning the identified violation. Our written response is included as an attachment to this letter.

10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires in part, that activities affecting quality shall be prescribed by instructions, procedures, or drawings of a type appropriate to the circumstance and be accomplished in accordance with them. Contrary to this requirement, various Reactor Engineering Instructions were determined to be inappropriate, and others were not followed. We agree that these examples do constitute a violation of Criterion V.

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Additionally, in the July 20, 1994, cover letter that transmitted the results of Inspection Reports 50-266/94011(DRP) and 50-301/94011(DRP), you made an inquiry concerning a proposed Technical Specification change request regarding quadrant power tilt. In confirmation of previous discussions held between members of Wisconsin Electric and your staff, we do intend to submit a change request that will propose revisions to specifications concerning quadrant power tilt.

Sincerely,

Bob Link
Vice President
Nuclear Power

FDP/jg

Enclosure

cc: NRC Regional Administrator, Region III
NRC Resident Inspector

RESPONSE TO NOTICE OF VIOLATION

Wisconsin Electric Power Company
Point Beach Nuclear Plant, Units 1 and 2
Docket Nos. 50-266 and 50-301
License Nos. DPR-24 and DPR-27

During a routine safety inspection conducted by Messrs. J. Gadzala and A. McMurtray from May 27 through July 10, 1994, one violation of NRC requirements was identified. This violation was classified as Severity Level IV. Inspection Report Nos. 50-266/94011(DRP) and 50-301/94011(DRP) and the Notice of Violation (NOV), transmitted to Wisconsin Electric on July 20, 1994, provide details regarding this violation.

In accordance with the instructions provided in the NOV, 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 and results achieved; (3) corrective action to be taken to avoid further violations; and (4) the date when full compliance will be achieved.

VIOLATION:

10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires in part, that activities affecting quality shall be prescribed by instructions, procedures, or drawings of a type appropriate to the circumstance and be accomplished in accordance with them.

Contrary to the above, various Reactor Engineering Instructions were not appropriate, or were not followed, as evidenced by the following examples:

a. Reactor Engineering Instruction REI 13.0, "Quadrant Power Tilt," was not appropriate in that it stated that the power range channel deviation alarm be used as the primary indication of core tilt even though the circuitry for this alarm indicates a progressively less conservative value for quadrant power tilt as power is reduced below 100%.

b. Reactor Engineering Instruction REI 2.0, "Power Range Detector Power Level Adjustment," was not appropriate in that it did not contain any precautions concerning adjusting nuclear instruments at reduced power or during xenon transients from short term power excursions and certain key aspects of a vendor technical bulletin were not incorporated in the procedure.

c. The guidance in Reactor Engineering Instruction REI 12.3, "Delta Flux Control," was not followed during the February 6, 1994, Unit 1 downpower.

d. Dial values were not recorded following an adjustment of nuclear instruments performed at 1:54 p.m. on February 6, 1994, as required by Reactor Engineering Instruction REI 2.0, "Power Range Detector Power Level Adjustment."

e. No hand calculations of quadrant tilt were performed in response to several channel deviation alarms received during the Unit 1 power ascension on February 6, 1994, as required by Reactor Engineering Instruction REI 13.0, "Quadrant Power Tilt."

We agree that the events and circumstances described in these five examples do constitute a violation of 10 CFR 50, Appendix B, Criterion V.

REASON FOR VIOLATION:

The power range channel deviation alarm is the only direct control board indication of quadrant power tilt. This alarm annunciates when a two percent deviation exists between the maximum and the minimum power range channel, as calculated by a comparator. At 100 percent power, this alarm is conservative. Assuming the setpoint for the comparator is accurately set at two percent, the setpoint is conservative for all power levels above 75 percent. If tolerances for the setpoint are considered, the alarm is conservative for all power levels above 93 percent. REI 13.0, "Quadrant Power Tilt," inappropriately stated that the power range channel deviation alarm be used as the primary indication of tilt, regardless of power level. The procedure did not take into account the nonconservatism of the channel deviation alarm at reduced power levels.

REI 2.0, "Power Range Detector Power Level Adjustment," states, in the "Precautions and Limitations" section, that if power ranges were adjusted below 90 percent power, power level shall be checked between 90 percent and 95 percent power during the power increase to full load as per Step 5.1 of the procedure. This procedure also provides guidelines for the adjustment of power range channels during steady state operation, following a unit shutdown, and during load swings from full power. These guidelines were derived from Westinghouse Technical Bulletin TB 92-14-RO, "Instrumentation Calibration at Reduced Power." However, Wisconsin Electric has only incorporated portions of the technical bulletin believed to be applicable to Point Beach Nuclear Plant.

Following the shutdown of Unit 1 on February 5, 1994, an evaluation team was formed to review the evolution. This team was tasked with determining the causal factors associated with the flux control problems encountered during the return to power. The evaluation team identified several factors that contributed to the flux control problems during the power ascension. The procedural issue with REI 12.3, as described in this notice of violation, was one of the factors identified. The evaluation team believed that REI 12.3, "Delta Flux Control," was viewed by the operations group

as a guideline and therefore was not followed during the load reduction. This instruction allows operator discretion when applying this instruction, which may explain why the instruction was not followed.

On February 6, 1994 at 1330, during the power ascension following completion of reactor coolant system repairs, the plant process computer (PPCS) indicated a sum tilt of 1.03 on one of the nuclear instruments. Subsequently, the power range potentiometers were adjusted by plant operators in accordance with REI 2.0. However, during performance of the procedure, the dial indicator values were not recorded on the logsheet located in the Reactor Operating Data Book, ROD 14. This action was directed by Step 5.5 of REI 2.0. The evaluation team that reviewed this event believes that the failure to log the dial indicator values was a one-time oversight by the operator who performed the adjustments.

On February 6, 1994, during the power ascension, several channel deviation alarms were received. REI 13.0, "Quadrant Power Tilt," requires that manual calculations be performed upon receipt of this alarm. The on-shift operators were performing manual calculations, but they were being performed because the operators wanted to compare the readings from PPCS with readings obtained from nuclear instrumentation. During the time that these calculations were being performed, intermittent channel deviation alarms were being received in the control room. The on-shift crew believed that these intermittent alarms may have been caused by a faulty comparator. In fact, a maintenance work request was issued subsequent to the power ascension to investigate the comparator. This investigation subsequently revealed that the comparator was functioning properly. Although manual calculations were not performed in response to every channel deviation alarm, as directed by REI 13.0, they were performed in order to verify the accuracy of control room indications.

CORRECTIVE ACTION TAKEN AND RESULTS ACHIEVED:

Following the power ascension on February 6, 1994, an evaluation team was formed to review the evolution. This team was tasked with determining the causes of the flux control problems encountered during the return to power. The results of the evaluation were issued, in a memo to the plant manager, on March 23, 1994.

REI 13.0, "Quadrant Power Tilt," was revised and issued on June 10, 1994. The revised instruction now specifies which alarms should be used to monitor for a core tilt at different power levels. If reactor power is greater than or equal to 95%, the channel deviation alarm on the control board, or one of the four tilt alarms on the Plant Process Computer System (PPCS) will be used. The PPCS has an alarm for power tilt, upper tilt, lower tilt, and sum tilt. If reactor power is less than 95%, only the PPCS alarms will be used to monitor for a tilt condition. This procedure change ensures, regardless of power level, that a conservative indication of core tilt is used.

CORRECTIVE ACTION TO BE TAKEN TO AVOID FURTHER VIOLATIONS:

The Reactor Engineering group will have discussions with Westinghouse concerning the applicability of Westinghouse Technical Bulletin TB 92-14-RO, "Instrumentation Calibration at Reduced Power," to Point Beach Nuclear Plant. Should these discussions identify any additional information applicable to Point Beach Nuclear Plant, this information will be incorporated into REI 2.0, "Power Range Detector Power Level Adjustment." These discussions and any subsequent procedure revisions will be completed by January 13, 1995.

REI 12.3, "Delta Flux Control," is being revised to provide clear guidance to plant operators. Additionally, this instruction will be reclassified as an information procedure in accordance with the guidance contained in Nuclear Procedure NP 1.1.4, "Procedure Use and Adherence." An information procedure, as defined in NP 1.1.4, allows activities to be performed from memory, but requires the procedure user to be responsible for knowing the contents of the procedure. Reclassification of this REI will ensure that the operators are knowledgeable of the required information in the REI. We anticipate completing this revision by October 31, 1994.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Wisconsin Electric will be in full compliance once all of the procedure revisions are completed. We anticipate completing the final procedure revision by January 13, 1995.