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December 14, 1998

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

10 CFR 2.201  
NUREG-1600

Ladies/Gentlemen:

Docket 50-305  
Operating License DPR-43  
Kewaunee Nuclear Power Plant  
Reply to Notice of Violation and Deviation, Inspection Report 98-014

Reference: 1) Letter from J. A. Grobe (NRC) to M. L. Marchi (WPSC) dated November 13, 1998 (NRC Operational Assessment Team Inspection 50-305/98014 (DRS), Notice of Violation and Notice of Deviation)

In the reference, the Nuclear Regulatory Commission (NRC) provided Wisconsin Public Service Corporation (WPSC) with the results of the NRC team inspection activities conducted from September 14 through October 2, 1998.

During the inspection, NRC identified a Severity Level IV violation and a deviation from an NRC commitment. The violation was cited for failing to implement temporary changes to procedures as required by plant administrative directives. The deviation was cited for failing to notify the NRC when revisions were made to the plant administrative directive. The directive expanded work hours in a 48 hour period from 24 to 28 to allow for 12 hour shift schedules.

Attached is our response to the notices. If you should have any questions with regard to this response, please contact me or a member of my staff.

Sincerely,

for Mark L. Marchi  
Vice President-Nuclear

GIH

Attach.

cc: US NRC Senior Resident Inspector  
US NRC Region III

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ATTACHMENT 1

Letter from M. L. Marchi (WPSC)

to

Document Control Desk (NRC)

dated

December 14, 1998

Re: Reply to Notice of Violation and Deviation, Inspection Report 98-014

NRC Notice of Violation 98-014-01

Technical Specification 6.8 requires adherence to section 5.2.2 of ANSI 18.7-1976.

Section 5.2.2 of ANSI 18.7-1976 requires the licensee to follow procedures and the requirements for use of procedures shall be prescribed in writing. Also, the standard requires licensee to establish methods by which temporary changes to approved procedures can be made.

Nuclear Administrative Directive (NAD) 5.9, Revision B, "Alarm Response Procedures" and NAD 12.2, Revision D, "Surveillance Procedures," provide full compliance with this standard as it relates to establishing, approving and changing procedures.

Section 5.3.1 of NAD 5.9 states that when plant conditions, procedural error, or unforeseen circumstances require a change to complete an alarm response procedure, a temporary change in lieu of a formal procedure revision may be made in accordance with this procedure.

Section 5.6.1 of NAD 12.2, states when plant conditions, procedural error, or unforeseen circumstances require a change to complete a surveillance procedure, a temporary change in lieu of a formal procedure revision may be made in accordance with this procedure. Changes to intent are generally considered alterations of acceptance criteria.

Contrary to the above:

- a. The inspectors identified that on September 16, 1998, the licensee did not temporarily change the annunciator response procedure for control room annunciator 47091-C, as required by NAD 5.9, when an unforeseen problem, specifically, a failure of a local panel power supply, prevented completion of the alarm response sheet as written.
- b. The inspectors identified on February 28, 1998, and July 22, 1998, the licensee failed to temporarily change surveillance procedure SP 02-138, Revision AJ, "SW [service water] Pump and Valve Test - IST [inservice testing]" and SP 55-167-5, Revision AJ, "Miscellaneous System Valve Testing (IST)," to reflect new acceptance criteria for reference, action, and limiting value stroke times prior to performing the tests for three safety-related valves as required by NAD 12.2. As a result, operability of three safety-related valves was based on acceptance criterion unapproved by the plant operations review committee and plant manager.

WPSC Response

Wisconsin Public Service Corporation (WPSC) does not contest this violation. WPSC's assessment of failing to implement temporary changes to the annunciator response procedure has revealed that administrative weaknesses exist which support NRC's concern. Although we do not agree that a violation occurred in the example provided, we understand the need to improve various administrative processes to ensure that plant staff implement temporary changes to procedures when required. Regarding failure to implement temporary changes to the surveillance procedures, WPSC agrees that temporary changes should have been implemented to reflect the changes in acceptance criteria for the testing that was performed.

Reason For Violation (example a)

As we indicated in the inspection exit and during a subsequent teleconference with the NRC, WPSC does not agree that a violation of the Nuclear Administrative Directive (NAD) 5.9 or the Technical Specifications occurred regarding temporary changes to the annunciator response procedure (ARP). However, after considering the administrative guidance for other programs, in this case the operator work-around program, we found that some program requirements do not provide sufficient guidance to ensure that plant staff review the need for temporary procedure changes when they may be required.

The primary basis for our disagreeing with the violation example is that the need for a temporary procedure change is based on the condition encountered and determining if procedure changes are **required** [emphasis added]. In the case of the ARP we understand NRC's observation that if we felt a need for providing additional instructions to the operators to address the abnormal condition, we should also have changed the ARP. However, we also felt that the personnel involved were being conservative in issuing additional guidance and were fulfilling the requirements of the

operator work-around program. We continue to maintain that a change to the ARP was not required.

As indicated earlier, WPSC agrees that weaknesses exist in administrative processes whereby temporary procedure changes may not be implemented in accordance with NADs that direct making temporary changes to procedures when required. Specifically, a number of programs and governing documents require the implementation of actions to take regarding what may be a degraded or potentially deleterious condition. What we have found is that these governing documents do not specifically instruct personnel to review the need for when and or if temporary procedure changes are required. Therefore, the lack of direction in other plant program documents could lead to the basis for this violation.

Although not specifically mentioned in the violation, NRC indicated concerns with Kewaunee's use of danger cards providing instructions to operators which also should have resulted in temporary procedure changes. WPSC does not dispute that the instructions could have been included in applicable procedures and implemented as part of the temporary change process. WPSC maintains that danger cards can be used to provide information to personnel. However, we recognize the need to enhance the NADs used to implement the use of danger cards to ensure temporary procedure change requirements are satisfied.

Reason for Violation (example b)

Failing to implement the changes to the surveillance procedures (SPs) was caused by a lack of understanding by members of the plant staff.

One facet of Kewaunee's process for controlling procedures while they are in revision is to attach a "Technical Content Inadequate (TCI)" control sheet to the working copies of individual group

procedures. The TCI is only required for pending changes whereby should an individual use the procedure, and if the affected portion of the procedure were implemented, it could result in placing the plant or plant equipment in an undesirable condition. The intent of the TCI is to forewarn personnel of an impending procedure change and preclude the affected portion of the procedure from being used without the change being implemented. Generally, TCIs provide the information necessary for the user to understand what the procedure deficiency is and what would be needed for acceptable procedure performance. For the SPs in this example, the TCIs indicated that valve timing acceptance criteria had changed following maintenance. What the performers of the procedure failed to do was to make the necessary changes to the procedure prior to testing the affected valves (i.e., follow the temporary procedure change process).

The individuals involved in performing SPs 02-138 and 55-167-5 did not fully understand the purpose for the control sheets attached to the procedures. They assumed that the information provided on the control sheets was a substitute for the information in the procedure and followed the information on the TCI.

In addition to the personnel performing the procedure not understanding the required actions, it appears that Operations management's understanding of the TCI sheet basis was also deficient. This is evident by the completed procedures receiving Control Room Supervisor, Shift Supervisor and upper management reviews without anyone recognizing that temporary change requirements were not implemented.

#### Corrective Actions

- 1) Reviews of administrative process governing documents which provide personnel guidance for implementing actions will be conducted. The purpose of the reviews is to identify where temporary procedure change guidance may be required. Subsequent to these reviews changes to applicable documents will be implemented.

- 2) Outstanding danger cards will be reviewed to determine if any actions or information provided by danger cards should have resulted in temporary procedure changes being implemented. If this review finds that temporary procedure changes should have been implemented, then appropriate changes will be made.
- 3) Additional guidance will be provided to plant staff on the basis for TCI control sheets. This guidance will include specific instructions to ensure that personnel are aware that they need to implement the temporary procedure change requirements when using a portion of the procedure that is controlled by the TCIs.
- 4) Kewaunee is currently in the process of revising the governing documents for plant procedure development, revision and control. Included in this effort are proposed changes to enhance temporary procedure change guidance and the use of the TCI control sheets. Subsequent to completing the directive revisions, plant staff training will be provided to re-emphasize the temporary change processes for procedures.

#### Compliance Schedule

- 1) An initial distribution of the basis for TCIs was distributed to plant staff via the plant's electronic mail system on October 2, 1998. This information will be redistributed to group leaders for re-emphasis to the plant staff at individual group meetings and/or musters before the end of January 1999.
- 2) Outstanding danger card reviews will be completed within the next two weeks. If this review identifies the need for changes to existing plant procedures, it is anticipated that they will be completed immediately upon identification.



- 3) Due to the broader nature of this corrective action, and the considerable resources required, it is anticipated that six to nine months will be needed for completion.
- 4) Current efforts to revise the plant procedure development, revision and control process are expected to be complete by the end of the first quarter 1999. Training of plant staff on the changes to the process is expected to be complete within an additional six months.

NRC Notice of Deviation 98-014-02

Generic Letter 82-12 states that the guidelines described in the document shall be followed. One such guideline specified that an individual should not be permitted to work more than 24 hours in any 48-hour period.

In a letter dated December 23, 1982, to Mr.D.G.Eisenhut, then Director of the Division of Licensing in the Office of Nuclear Reactor Regulation, the licensee stated that their administrative procedure which governs the use of overtime had been revised when Generic Letter 82-12 was issued. The licensee further stated that the administrative procedure was in agreement with industry guidelines.

In a safety evaluation report dated February 10, 1984, the NRC stated that a Technical Specification was not warranted since the licensee incorporated the guidance of Generic Letter into their administrative procedure.

Contrary to the above, the inspectors identified that Nuclear Administrative Directive 3.8, Revision A, "Overtime Policy," stated that personnel on a 12 hour shift schedule should not exceed working 28 hours in a 48 hour period. This change of commitment from 24 to 28 hours was not communicated to the NRC.

WPSC Response

WPSC does not contest this deviation. We agree that a change to a commitment was not communicated to the NRC.

Reason for Deviation

The change to the administrative directive was made in 1992. The reason for changing the directive was to account for changes in the rotating shift workers' normal work hours; Kewaunee went from an eight hour to twelve hour shift rotation. The previous guidance did not permit routine exceedence of 24 hours in a 48 hour period. Based on the changing shift hours, it was recognized that the guidance defining normal scheduled work hours would also have to change due to allowance for shift turnover and unforeseen circumstances. Specifically, if a twelve hour shift worker needed to remain on shift due to lack of a relief, the governing document should not preclude the extended time. The specific statement added was: "For personnel on 12 hour shift schedule, routine turnover and occasional short term relief is acceptable so long as no individual exceeds 28 hours in a 48 hour period, and that there is at least an 8 hour rest period between shifts." It should also be noted that 1) NRC guidance did not require that shift turnover time be included in the time restriction and 2) this extended time is restricted to only those plant staff on a twelve hour shift schedule.

According to personnel involved in making the change, they specifically looked at Generic Letter (GL) requirements. This is supported by the fact that several references including GL 82-12 and NUREG-0737 Item I.A.1.3, were added to the directive during the revision and reflects the plant staff understanding that changes to commitments required evaluation prior to implementation. The personnel involved concluded that the change they proposed was fully within the intent of the guidance provided. Specifically, the intent of the GL being that licensees maintain a plant staff of sufficient size to preclude frequent use of overtime. The changes to Kewaunee's procedure do not deviate from this intent and were therefore determined to be acceptable.

That the commitment change was evaluated indicates the sensitivity to plant staff on this requirement prior to making a change. However, the formal commitment change procedure,

including a requirement for NRC notification of changes, was not established until 1994. Thus the mechanism to ensure NRC notification of the commitment change was not in place at the time of this change.

#### Corrective Actions

After identifying that the commitment change occurred, a Kewaunee Assessment Process (KAP) form was initiated. As part of the KAP evaluation it was determined that current review processes for procedure revisions should preclude similar occurrences. This was evident when a later change was made to the same directive which included a commitment change. As part of that change, a 10CFR50.59 safety evaluation was performed and the results were submitted to the NRC with the periodic summary of safety evaluation reports.

Performing safety evaluations is prescribed in the Kewaunee General Nuclear Procedure (GNP) 4.3.1, "Guide to Safety Review, Safety Evaluations, and Second Level Reviews." Included as part of that guidance is a statement to the effect that changes in NRC commitments should be considered changes to the USAR. Therefore, current procedure revision reviews would require a commitment review for safety implications. Had this been performed for the change in the overtime directive in 1992, this deviation could have been avoided.

Also, as part of the KAP evaluation, a safety evaluation was performed for the change in the overtime policy. The results of the review concluded that there are no unreviewed safety questions introduced by the change in work hour limits. This conclusion is based primarily on the intent of the GL being satisfied and the 28 hours being consistent with other portions of the GL guidance. The GL 82-02 indicates 16 hours in one day being acceptable with a minimum rest period of eight hours between shifts. For a twelve hour shift worker, if the extra four hours were worked in one shift, the 16 hours would be maintained and a return to work would not occur until

eight hours later. No more than 16 hours in a 24 hour period remains a requirement in Kewaunee's directive.

An additional program required to be implemented by licensees which further supports the evaluation of no challenge to safety by the increased work hours is the behavioral observation / fit-for-duty program. In the unlikely event that a twelve hour shift worker were to become fatigued beyond the capability for performing intended duties due to excessive hours, this should be recognized and a relief could be arranged not unlike a shift worker's becoming incapacitated due to other causes.

#### Corrective Actions Completion

The only remaining action is to present the safety evaluation for the directive change to the plant operations review committee. This is expected to be completed by December 31, 1998.