

# CATEGORY 1

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RCHI, M.L.      Wisconsin Public Service Corp.  
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SUBJECT: Responds to NRC 97-012 ltr re violations noted in insp rept  
50-305/97-11. Corrective actions: will review & establish  
performance criteria associated w/hydrogen analyzers & post-  
LOCA hydrogen control sys.

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1-920-433-5544 fax

October 13, 1997

10 CFR 2.201

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

Ladies/Gentlemen:

Docket 50-305  
Operating License DPR-43  
Kewaunee Nuclear Power Plant  
Reply to Notice of Violation, Inspection Report 97-011

Reference: 1) Letter from J. A. Grobe (NRC) to M. L. Marchi (WPSC) dated September 12, 1997 (NRC Inspection Report 50-305/97011 and Notice of Violation).

In reference 1, the Nuclear Regulatory Commission (NRC) provided Wisconsin Public Service Corporation (WPSC) with the results of the Maintenance Rule Baseline NRC inspection of Kewaunee conducted August 4 through August 8, 1997.

During the inspection, NRC identified two Severity Level IV violations. The first concerned reliability performance criteria for high safety significant systems that were inconsistent with the assumptions in Kewaunee's probabilistic risk assessment. The NRC reviewed and accepted our corrective actions during the inspection and stated no further response is required. The second violation concerned establishing inappropriate performance criteria of "run to failure" for the containment hydrogen monitoring and mitigating functions. Attached is our response to the second violation.

If you have any questions with regard to this response, please contact me or a member of my staff.

Sincerely,

Mark L. Marchi  
Manager - Nuclear Business Group

KJS  
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

October 13, 1997

Re: Reply to Notice of Violation, Inspection Report 97-011

NRC Notice of Violation 97-011-003

10 CFR 50.65(a)(1) requires, in part, the holders of an operating license shall monitor the performance or condition of structures, systems or components (SSCs), against licensee established goals, in a manner sufficient to provide reasonable assurance that such SSCs as defined in 10 CFR 50.65(b), are capable of fulfilling their intended functions. Such goals shall be established commensurate with safety. When the performance or condition of an SSC does not meet established goals, appropriate corrective action shall be taken.

10 CFR 50.65(a)(2) requires, in part, that monitoring as specified in 10 CFR 50.65 (a)(1) is not required where it has been demonstrated that the performance or condition of an SSC is being effectively controlled through the performance of appropriate preventive maintenance, such that the SSC remains capable of performing its intended function.

Contrary to 10 CFR 50.65(a)(2), as of July 15, 1997, the time that the licensee elected to not monitor the performance or condition of certain SSCs against licensee-established goals pursuant to the requirements of Section (a)(1), the licensee had not demonstrated that the performance or condition of certain SSCs within the scope of 10 CFR 50.65 were being effectively controlled through the performance of appropriate preventive maintenance.

The licensee had not demonstrated that the performance of the hydrogen analyzers and the post-loss-of-coolant-accident hydrogen control ventilation system provided little or no contribution to system safety function to be allowed to "run to failure" and addressed in accordance with the requirements of 10 CFR 50.65(a)(2). Specifically, the licensee had failed to establish adequate justification to allow these SSCs to have performance criteria of "run to failure" and be monitored under Section (a)(2). The safety functions of these SSCs were relied upon in the safety analysis and emergency operating procedures to monitor and reduce hydrogen concentrations in the containment following an accident. These SSCs were relied upon to remain functional during and following design basis events to ensure the containment would remain intact to prevent or mitigate the consequences of accidents that could result in potential offsite exposure comparable to 10 CFR 100 guidelines. As a result, it was not demonstrated that the systems were controlled such that they remained capable of performing their intended function. Therefore, the licensee's technical basis for placing these SSCs under the requirements of 10 CFR 50.65(a)(2) was inadequate and these standby SSCs should have been monitored in accordance with 10 CFR 50.65(a)(1). (50-305/97011-03(DRS))

WPSC Response

WPSC does not contest this violation. Although WPSC does not agree with the above finding and continues to believe our position has merit, we have no information beyond what was presented to the inspectors during the inspection. Our assessment of the significance of this performance

criteria issue concluded that there were no significant safety hazards involved. In addition, WPSC uses other plant maintenance programs to ensure the proper operation of the functions associated with the containment hydrogen analyzers and the post-loss-of-coolant-accident hydrogen control system.

#### Reason For Violation

This event was caused by Kewaunee's expert panel's interpretation of "recovery versus mitigation" time period and its application to the containment hydrogen analyzers and the post-loss-of-coolant-accident hydrogen control system.

As part of WPSC's implementation of the maintenance rule, an expert panel performed the scoping process. During the scoping effort, the expert panel discussed the scoping questions and the intent of the maintenance rule regarding equipment used in accident mitigation versus recovery. The scoping questions discuss mitigation and make no reference to recovery. The expert panel reviewed several licensing positions regarding mitigation and recovery to determine when recovery began. The licensing position reviews determined that an acceptable time frame for mitigation was 72 hours. Therefore, the expert panel concluded that equipment not needed in the first 72 hours after an accident initiation is outside the scope of the maintenance rule.

A review of the USAR revealed that under the very conservative assumptions of the post-loss-of-coolant containment hydrogen concentration would not build up to a dangerous concentration for greater than 11 days. Since equipment not needed until 72 hours post-accident is outside the scope, the performance criteria for the containment hydrogen analyzers and the post-loss-of-coolant-accident hydrogen control system were designated as "run to failure". Although the "run to failure" performance criterion was used for the maintenance rule, Kewaunee continued to perform maintenance and surveillance activities necessary to meet its NUREG 0737 commitments.

As stated in reference 1, this technical justification was considered unacceptable by the NRC.

Document Control Desk  
October 13, 1997  
Attachment 1, Page 3

Corrective Actions

In response to this issue, WPSC will review and establish the performance criteria associated with the hydrogen analyzers and the post-loss-of-coolant-accident hydrogen control system to address the NRC concern.

Compliance Schedule

It is our intent to complete the corrective measures prior to January 31, 1998.

*Number*  
*10/31/97*

NRC-97-109



**Wisconsin Public Service Corporation**  
(a subsidiary of WPS Resources Corporation)  
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*10/20/97*

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