

June 6, 2001

EA-01-070

Mr. M. Reddemann  
Site Vice President  
Kewaunee and Point Beach Nuclear Plants  
Nuclear Management Company, LLC  
6610 Nuclear Road  
Two Rivers, WI 54241

SUBJECT: FINAL SIGNIFICANCE DETERMINATION FOR A FINDING AT KEWAUNEE -  
NRC INSPECTION REPORT 50-305/01-02(DRS)

Dear Mr. Reddemann:

The purpose of this letter is to provide you with the final results of our significance determination of the preliminary Yellow finding identified in Inspection Report 50-305/01-02(DRS). The NRC has now determined that the finding should be characterized as Green (i.e., an issue which has very low safety significance). The finding involved a non-rated fire barrier in the auxiliary feedwater pump 1B room. It was assessed using the significance determination process and was preliminarily characterized as Yellow (i.e., an issue with substantial importance to safety, which may require additional NRC inspections). At your request, a Regulatory Conference was scheduled for May 3, 2001.

Prior to the scheduled Regulatory Conference, Nuclear Management Company, LLC (NMC) issued Revision 2 to Licensee Event Report (LER) 2001-02, dated April 30, 2001, which provided additional information pertaining to the fire barrier. This information was not available at the time the NRC issued the inspection report and preliminary significance determination. Revision 2 to LER 2001-02 included information that formed the basis for lowering the risk categorization of the finding. During our telephone discussion on May 1, 2001, we agreed that the conduct of the Regulatory Conference would be postponed pending NRC review of the information in Revision 2 of LER 2001-02.

Revision 2 to the LER provided the results of a fire test that had been performed by Underwriter's Laboratory (UL) to determine the ability of the fire barrier to withstand actual fire conditions. During that test, a replica of the non-rated fire barrier was subjected to a fire test using standard testing methodology. The test results demonstrated that the fire barrier provided a measure of protection for at least 60 minutes, short of the protection provided by a three-hour rated fire barrier as required. In addition, you indicated that a revised analysis of the combustibles in the fire area determined that the maximum fire loading for the area would support a fire with a duration of 30 minutes.

The revised LER also provided an analysis which demonstrated that the original fire ignition frequency identified in the Kewaunee updated Individual Plant Examination for External Events (IPEEE) was very conservative. The revised ignition frequency provided a significant reduction in risk. We understand that the IPEEE value was based on generic information for continuously operating pumps and standby pumps. In addition, the IPEEE value included all fires that could occur in the fire area rather than focusing on only the more severe lubricating oil fires which could affect the integrity of the fire barrier.

The NRC staff reviewed the information provided in Revision 2 of LER 2001-02. In response to the additional information provided in the revised LER, the NRC staff re-assessed the finding using the applicable significance determination process (SDP). The fire test results supported a barrier degradation rating of "moderate" in determining the fire barrier degradation term in the SDP. Substituting this result and the revised value for the fire ignition frequency into the expression for fire mitigation frequency results in a safety significance determination of Green. Although the staff had questions with respect to the fire test performed and the ignition frequency analysis cited in the revised LER, we have concluded that there was ample margin to support a risk categorization of Green for the finding.

The failure to have a fire barrier with a three-hour rating is considered a violation of 10 CFR 50, Appendix R, Section III.G.2, which will be documented in a future NRC inspection report as a Non-Cited Violation.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

**/RA/**

John A. Grobe, Director  
Division of Reactor Safety

Docket No. 50-305  
License No. DPR-43

cc: K. Hoops, Manager, Kewaunee Plant  
D. Graham, Director, Bureau of Field Operations  
Chairman, Wisconsin Public Service Commission  
State Liaison Officer

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**/RA/**  
 John A. Grobe, Director  
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 D. Graham, Director, Bureau of Field Operations  
 Chairman, Wisconsin Public Service Commission  
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