

Public Service

Wisconsin Public Service Corporation
(a subsidiary of WPS Resources Corporation)
600 North Adams Street
P.O. Box 19002
Green Bay, WI 54307-9002
1-920-433-5544 fax

September 8, 1998

10 CFR 2.201

U. S. Nuclear Regulatory Commission
Attention: 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 98-010

Reference: 1) Letter from J. A. Grobe (NRC) to M. L. Marchi (WPSC) dated August 7, 1998 (NRC Radiation Protection Inspection Report 50-305/98010 (DRS) and Notice of Violation)

In reference 1, the Nuclear Regulatory Commission (NRC) provided Wisconsin Public Service Corporation (WPSC) with the results of the NRC inspection activities conducted July 6 through July 10, 1998.

During the inspection, NRC identified a Severity Level IV violation. The violation was cited due to identification of several individuals who failed to initial the appropriate radiation work permit (RWP) before entering the radiologically controlled area (RCA) to perform work.

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

Sincerely,



Mark L. Marchi
Site Vice President-Kewaunee Plant

MTR

Attach.

9810050040 980925
PDR ADDCK 05000305
G PDR

cc: US NRC Senior Resident Inspector
US NRC Region III

SEP 14 1998

ATTACHMENT 1

Letter from M. L. Marchi (WPSC)

To

Document Control Desk (NRC)

Dated

September 8, 1998

Re: Reply to Notice of Violation, Inspection Report 98-010

NRC Notice of Violation 98-010-01

Technical Specification 6.11, Radiation Protection Program, requires, in part, that procedures for personnel radiation protection be prepared consistent with the requirements of 10 CFR Part 20 and be approved, maintained and adhered to for all operations involving personnel radiation exposure.

10 CFR Part 20.1101(a), requires, in part, that the licensee develop, document and implement a radiation protection program sufficient to ensure compliance with the provisions of this part.

Nuclear Administrative Directive 8.3, "Radiation Work Permit," a procedure that documents and implements the radiation protection program and the requirements of Part 20, requires, in part, that personnel performing work read and understand the radiological controls stated on the radiation work permit (RWP). Each person working under the RWP shall initial the RWP prior to first entry into the radiologically controlled area, signifying understanding of the work controls requirements and precautions.

Contrary to the above, between January 1 and June 24, 1998, several individuals that performed work in a radiologically controlled area failed to initial the RWP prior to first entry into the area, signifying understanding of work controls, requirements and precautions.

WPSC Response

Wisconsin Public Service Corporation (WPSC) does not contest this violation. Initialing the RWP is only one part of Kewaunee's defense-in-depth philosophy for providing radiological protection to workers, and it is our conclusion that the effect of this breakdown in adherence to administrative procedure had minimal impact on individual personal exposures.

Reason For Violation

This specific event was caused primarily by failure to put a process in place that would have allowed for monitoring whether all workers entering the radiologically controlled area (RCA) had initialed the RWP prior to their first entry.

Even though eleven workers failed to initial the RWP, other elements of the radiation protection program continued to function and provide the workers with an understanding of work controls, requirements and precautions. Examples of these additional elements are: annual General

Employee Training sessions where changes to the radiation protection program are explained to all plant staff, face-to-face discussions between radiological protection personnel and workers just prior to each entry into the radiologically controlled area to brief the workers on radiological conditions in the areas in which they will be working, formal ALARA briefings for workers prior to the start of jobs requiring a higher level of radiological control than routine tasks, routine radiological surveys and postings to identify radiological hazards to workers, and on-the-job coverage of workers by trained and experienced Radiation Technologists.

A combined total radiation dose of approximately 16 millirem by thermoluminescent dosimeter (TLD) was received by ten of the workers who entered the RCA during the first six months of 1998 without initialing their RWPs. The eleventh worker received a TLD dose of approximately 110 millirem during RCA entries made without having initialed the RWP. All of that dose was received during the three day period of February 9-11, 1998, while the plant was shut down to repair a reactor coolant pump seal. This individual attended the pre-job ALARA meeting for that evolution, was briefed by Radiation Protection personnel prior to entering the RCA, and had all hotspots and radiological hazards pointed out to her by Radiation Protection personnel covering the work upon her arrival at the work site.

Approximately 13,700 entries into the RCA were made during the first six months of 1998. Of that total, about 110 entries were made by the eleven workers who did not initial their RWPs. All but one of these entries were associated with General RWPs having an annual duration. The single entry under a Regular RWP (an RWP for a specific task of limited duration) was made by the person who initiated it. That individual consulted with Radiation Protection personnel during the administrative processing of the RWP, signed it as Work Supervisor, and was briefed on the radiological hazards specific to the job prior to making the RCA entry.

A contributing cause of this event was a change made several years ago in the allowed duration of General RWPs. In the past, all radiation work permits were terminated and rewritten monthly. Radiological information and requirements were updated and workers read and initialed new RWPs each month. Today, General RWPs for jobs of a repetitive nature and for which radiological conditions are not expected to change abruptly are terminated and rewritten annually. The longer duration of these General RWPs coupled with the lack of a process to allow for monitoring worker compliance with the requirement to read and initial the RWPs has been identified as the root cause of this event.

Corrective Actions

Immediate corrective actions included comparing all open and terminated RWPs for the year against RCA entry logs to determine which workers were involved, and then requiring the identified workers read and initial the RWP(s) on which they were named to signify their understanding of the RWP requirements.

The long term corrective action, already taken, to prevent similar events from happening in the future was initiation of a process which will require a review, each quarter, of all RWPs to monitor worker compliance with the requirement to read the RWP; understand the work controls, requirements and precautions stated on the RWP; and initial the RWP to signify their understanding.

Although the longer duration of General RWPs is considered a contributor to the event, WPSC feels that periodic reviews are sufficient to provide opportunities for monitoring personnel performance in initialing RWPs and for recognizing the need for more comprehensive corrective actions.

Document Control Desk
September 8, 1998
Attachment 1, Page 4

Compliance Schedule

Immediate corrective actions were completed during or shortly after completion of NRC audit 98-010, performed July 6-10, 1998. The program for ensuring long term corrective action became effective on July 16, 1998, with initiation of a planning and scheduling card requiring quarterly RWP monitoring reviews.