

July 12, 1989

Docket Nos. 50-266
and 50-301

Mr. C. W. Fay, Vice President
Nuclear Power Department
Wisconsin Electric Power Company
231 W. Michigan Street, Room 308
Milwaukee, Wisconsin 53201

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Dear Mr. Fay:

SUBJECT: COMMENTS ON THE WISCONSIN ELECTRIC POWER COMPANY RESPONSE
TO GENERIC LETTER 88-17 WITH RESPECT TO EXPEDITIOUS
ACTIONS FOR LOSS OF DECAY HEAT REMOVAL FOR POINT BEACH
NUCLEAR PLANT UNITS 1 AND 2 (TAC NOS. 69765, 69766)

Generic Letter (GL) 88-17 was issued on October 17, 1988 to address the potential for loss of decay heat removal (DHR) during nonpower operation. In the GL, we requested (1) a description of your efforts to implement the eight recommended expeditious actions of the GL, and (2) a description of the enhancements, specific plans and a schedule for implementation of the six recommended program enhancements.

The NRC staff has reviewed your December 30, 1988 response to Generic Letter 88-17 on expeditious actions. We find that your response appears to meet the intent of the generic letter with respect to expeditious actions. However, your response is brief and sufficiently vague that we cannot fully understand your actions taken in response to GL 88-17. You may wish to consider several observations in order to assure yourselves that the actions are adequately addressed:

1. You have provided a broad list of subjects related to training for loss of DHR for licensed operators and Duty Shift Technical Advisors of your staff. Your response does not specifically state that maintenance personnel are also included in any of the training. The item was intended to include all personnel who can affect reduced inventory operation.
2. In some plants the quick closure of the equipment hatch is achieved by the installation of a reduced number of bolts. If you plan to use less than the full complement of bolts for sealing the equipment hatch then you should first verify that you can make a proper seal of the periphery mating surfaces to meet the closure criteria.

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3. You have indicated that you have three different types of level instrumentation and in addition you can determine if reactor coolant system (RCS) level has decreased to a low level by a pump flow rate display in the control room. You state that the operators have been trained to be aware that large changes in residual heat removal (RHR) pump discharge pressure and flow are indicative of air injection into pump suction which could be the result of low RCS level. Although this reading is not a direct level measurement it is good for the operators to know how to interpret this reading to recognize an indication of low level.

Your level system using a differential pressure transmitter (LT-447) is stated to have a range of 100 inches, extending from the bottom of the hot leg to 10 inches above the reactor flange. You state that it can be read in the control room on a digital display with a readout of ± 0.1 inches while in mid-loop. The accuracy of this readout is not provided.

You indicate that a second level system uses the reactor vessel level instrumentation (RVLIS) which is independent of the LT-447. You state that this system has a range of 45 feet and is available for trending in the control room. You have not provided its accuracy but have stated that it is not sufficiently accurate to control RCS level during mid-loop operation. Also you have not stated what type of level instrumentation this is. If this is the commonly used heated junction type, it is only able to detect step changes in level and is therefore only able to check against another level measuring instrument at discrete level points.

You state that a third method of level measurement is a stand pipe level indication. This consists of a tygon tube and scale installed in containment and is normally used to verify the accuracy of LT-447. You have not provided information on its range, accuracy, or where the taps are located. Also, you have not indicated if the readings can be monitored in the control room by means such as a TV monitor or if the readings will be alarmed. If the tygon tube reading will be monitored by an operator stationed inside of containment, the readings will need to be forwarded periodically to the control room. You have not stated if the readings will be recorded at intervals no longer than 15 minutes during normal conditions as stipulated in GL 88-17. When two or more level instruments are in place, care should be taken to resolve any discrepancy between the measurement systems. Also, the pressure of the reference leg should approximate the pressure of the void in the hot leg or be compensated to obtain the correct level value.

4. For the expeditious action regarding provision of at least two available or operable means of adding inventory to the RCS that are in addition to pumps that are a part of the normal DHR systems, you have provided information on two primary means. One of these means is the high pressure injection pump. The second means is gravity feed from the refueling water storage tank (RWST). In addition you have stated other sources of makeup that can be made available including spent fuel pumps P-12A and

P-12B and refueling water circulating pump P-33. You have not described the injection paths. As alluded to in Enclosure 2, Section 2.2.2 of GL 88-17, if openings totaling greater than 1 square inch exist in the cold legs, reactor coolant pumps and crossover piping of the RCS, the core can uncover quickly when pressurized under loss of RHR conditions. If this situation should arise, it is generally more effective to inject makeup water into the hot leg rather than the cold leg. When using gravity drain from the RWST, a proper means for venting must be in place and verified by calculations (see next item).

- 5. You have not stated the use of any specific vent openings on the hot side of the RCS to relieve RCS pressurization. Calculations need to be performed to verify the effectiveness of RCS openings, however, because even for relatively small hot side openings in the RCS, pressurization to several psi can still result. For example, with removal of a pressurizer manway, large steam flows in combination with flow restrictions in the surge line and lower pressurizer hardware may still lead to pressurization.

There is no need to respond to the above observations.

As you are aware, the expeditious actions you have briefly described are an interim measure to achieve an immediate reduction in risk associated with reduced inventory operation, and these will be supplemented and in some cases replaced by programmed enhancements. We intend to audit both your response to the expeditious actions and your programmed enhancement program. The areas where we do not fully understand your responses as indicated above may be covered in the audit of expeditious actions.

This closes out the staff review of your responses to the expeditious actions listed in the GL. The area of programmed enhancements will be addressed in a separate letter.

Sincerely,

Warren H. Swenson, Project Manager
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IV, V and Special Projects
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cc: See next page

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