Wisconsin Electric
POWER COMPANY

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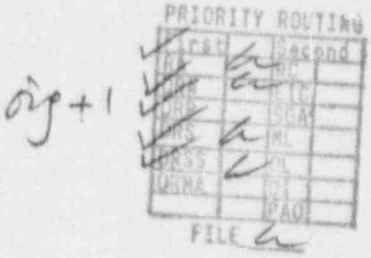
VPNPD-92-379
NL -92-145

December 22, 1992



Mr. A. Bert Davis, Regional Administrator
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
799 Roosevelt Road
Glen Ellyn, IL 60137

Dear Mr. Davis:

REQUEST FOR TEMPORARY WAIVER OF COMPLIANCE
RESIDUAL HEAT REMOVAL PUMP OPERABILITY
POINT BEACH NUCLEAR PLANT, UNIT 2

The purpose of this letter is to document the basis for the request from Wisconsin Electric Power Company, licensee for the Point Beach Nuclear Plant Unit 2, for a Regional Waiver of Compliance from the requirements of Point Beach Nuclear Plant Technical Specification Section 15.3.3.A.3.a for a 12-hour period. A 12-hour period was requested to allow sufficient time to restore the Train A Residual Heat Removal (RHR) pump to an operable status following the discovery of excessive seal leakage during routine testing. The requested waiver was verbally approved by members of your staff at 2141 on December 21, 1992. The pump was subsequently returned to an operable status within the allowed outage time specified in the Technical Specification Limiting Condition of Operation (LCO).

REQUIREMENT FOR WHICH A WAIVER WAS REQUESTED

The Point Beach Technical Specifications Section 15.3.3, "Emergency Core Cooling System, Auxiliary Cooling Systems, Air Recirculation Fan Coolers, and Containment Spray," Specification A.3.a, allows one of two Residual Heat Removal (RHR) Pumps to be inoperable for up to 24 hours during power operation. If the pump is not restored to service within the 24 hour period, the reactor is placed in hot shutdown. The basis of the specification is to provide a limited time relaxation from the single-failure criterion for the RHR pumps while assuring, with high reliability, that the safety system will function properly if required to do so; and allows sufficient time to effect repairs using safe and proper procedures.

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CIRCUMSTANCES SURROUNDING THE SITUATION

At 0018 on December 21, 1992, the PBNP Unit 2, Train A RHR pump, P-10A, was removed from service and declared inoperable in order to perform Inservice Test IT-04, "Low Head Safety Injection Pumps and Valves (Monthly)." This test is performed in accordance with the requirements in the ASME Boiler and Pressure Vessel Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Systems and Components." The test is performed to monitor RHR pump and valve performance and verify operability. During the performance of this test, the pump seal was found to be leaking. Seal leakage stabilized at approximately one-half gallon per minute. The maximum leakage from the RHR system allowed by Technical Specification 15.4.4.IV.D is 2 gallons per hour. This limits the off-site radiological consequences of leakage from the RHR system when operating in the containment sump recirculation mode following a design basis accident.

The Train B RHR pump rotating assembly and seals were replaced during Unit 2 maintenance and refueling outage completed on November 17, 1992. Extensive testing of the refurbished pump was performed in both the injection mode (suction from the Refueling Water Storage Tank) and residual heat removal modes following the replacement, prior to returning the pump to service. No problems were noted at that time. Since seal performance was acceptable prior to this refurbishment, a decision was made to replace the present rotating assembly and seals with those removed from the pump during the refueling and maintenance outage.

This replacement activity was expected to be completed by approximately 1900 on December 21, 1992, with subsequent post-maintenance testing to demonstrate operability expected to be completed by prior to expiration of the 24-hour LCO allowed outage time. At approximately 2100 on December 21, 1992, it did not appear that testing of the pump and returning the pump to an operable status could be completed prior to expiration of the LCO. However, testing and any emergent work necessary to correct possible problems discovered during testing were expected to be able to be completed within an additional 12 hours. Therefore, a Temporary Waiver of Compliance from the requirements of Technical Specification 15.3.3.A.3.a for a period of 12 hours was requested to allow the return of the pump to service.

The replacement of the RHR pump rotating assembly and seals was completed and the pump tested satisfactorily. The Train B RHR pump was declared operable at 0009 on December 22, 1992. This is within the 24-hour LCO allowed by the Technical Specifications.

We had previously discussed this situation and the potential for our request for a temporary waiver, with the NRC Resident Inspector, Mr. Nick Jackiw, and other members of the NRC Region III and NRR staffs at approximately 1430, on December 21, 1992.

COMPENSATORY MEASURES

Compensatory measures were taken to assure the operability of Train B of the RHR systems during the requested waiver period.

- All maintenance, testing, and surveillances were suspended on the Unit 2 safeguards systems. This includes both emergency diesel generators which supply power to the safeguards buses in both units following a loss of off-site AC power to the buses.

- System lineup checks, including a verification of the electrical system lineups have been performed to ensure Train B of the RHR system remains operable.

- The Train B RHR pump was tested to ensure operability when it was discovered that the Train A RHR pump was inoperable. This testing is required by Technical Specification 15.3.3.A.3.a.

SAFETY SIGNIFICANCE AND POTENTIAL CONSEQUENCES

The RHR system operates in the injection mode following a large-break Loss of Coolant Accident (LOCA), in the containment sump recirculation mode following a LOCA to ensure long-term cooling of the reactor core, and in the normal RHR cooling mode of operation following Steam Generator Tube Rupture (SGTR) and Main Steam Line Break (MSLB) Accidents, as well as normal decay heat removal during shutdown and cooldown. System design is such that only one train of the RHR system is needed during each of these modes of operation. Compensatory measures, as described above, are being taken to ensure that one train of the RHR system remains operable to fulfill these functions.

We have reviewed the preliminary Probablistic Risk Assessment (PRA) for PBNP to quantify the risk associated with the operation of PBNP Unit 2 with one train of RHR inoperable, including continued operation for an additional 12 hours in excess of the time allowed by Technical Specification 15.3.3.A.3.a. One train of RHR inoperable results in an overall increase in the core damage frequency by 83%, regardless of the outage time. Operation with one train is allowed for 24 hours by the Technical Specifications. Operation for an additional 12 hours beyond the 24 hour limit results in an overall

core damage frequency of approximately 0.14%. The overall increase in risk associated with operation for the additional 12 hour period requested by this temporary waiver is a small fraction of the overall risk.

JUSTIFICATION FOR THE DURATION OF THE WAIVER

The requested time period, 12 hours, for the waiver was expected to be sufficient to allow us to complete repairs and testing on the Unit 2 Train A RHR pump and return it to operable status. This short duration also is consistent with maintaining overall system availability as high as possible.

SIGNIFICANT HAZARDS CONSIDERATION

We have evaluated this temporary extension of the LCO allowed outage time for the RHR pump against the standards of 10 CFR 50.92 (c) and have determined that the operation of the PBNP Unit 2 in accordance with the temporary change involves no significant hazards consideration. Our evaluation and basis for this determination follows.

Operation of a facility in accordance with a proposed change does not involve a significant hazards consideration if it does not:

a. Involve a significant increase in the probability or consequences of an accident previously evaluated.

   An inoperable RHR pump is not an initiating event for any accident evaluated in the PBNP Final Safety Analysis Report (FSAR). An RHR pump out of service for a short extension of the presently allowed outage time, 24 hours, of Technical Specification 15.3.3.A.3.a will not increase the probability of an accident previously evaluated.

   Operation with an inoperable RHR pump for a short period of time may result in a slight increase in the consequences of accidents previously evaluated. For example, in the event of a large-break Loss of Coolant Accident (LOCA), a failure of the one operable RHR pump would inhibit the long-term cooling of the reactor core. Likewise, the Steam Generator Tube Rupture Accident and the Main Steam Line Break Accident analyzed in the FSAR assume that the unit is placed on RHR cooling within approximately six hours of the accident initiation, thus terminating any release of radioactive material to the atmosphere. Failure of the operable RHR pump following a steam generator tube rupture would prevent placing the reactor on RHR cooling, resulting in an increase in the duration of any radioactive release to the atmosphere and, therefore, the potential

consequences of the accident. However, compensatory measures have been taken to ensure the operability of the remaining train of the RHR system, thereby ensuring one train RHR is available following a design basis event to perform its function as analyzed in the FSAR. Only one train of RHR is required following any design basis event. Therefore, operation of the PBNP Unit 2 for additional 12 hours with only one operable train of RHR will not significantly increase the probability of any accident previously analyzed.

b. Create the possibility of a new or different kind of accident from any accident previously evaluated.

One train of the RHR system remains available to perform its function as analyzed in the FSAR. Only one train of the RHR system is required to perform all analyzed functions. There is no change to system design or function of the RHR system, or the operation of PBNP due to the inoperable RHR train. Therefore, the possibility of a new or different kind of accident from any accident previously evaluated is not created.

c. Involve a significant reduction in a margin of safety.

PBNP Unit 2 will continue to be operated, at all times, in accordance with its design, procedures, and prescribed operating limitations. Therefore, a reduction in a margin of safety will not occur.

Therefore, operation of PBNP Unit 2 in accordance with this requested temporary waiver from the conditions of Technical Specification 15.3.3.A.3.a involves no significant hazards consideration.

ENVIRONMENTAL CONSEQUENCES

Operation of PBNP Unit 2 under the conditions of the requested waiver from our license requirements does not result in changes to the installation or use of the facilities or components as described in 10 CFR 20, "Standards for Protection Against Radiation," increases or changes in the types of effluents that may be released off-site will not occur, nor will there be an increase in individual or cumulative occupational radiation exposure. Operation of the unit during the requested waiver period results in no significant hazards. Therefore, this request satisfies the categorical exclusion requirements of 10 CFR 51.22 (c) (9). An environmental assessment or environmental impact statement is not required.

STATE NOTIFICATION

We will notify the appropriate State of Wisconsin officials of the requested waiver by copy of this letter in accordance with 10 CFR 50.91 (b).

SUMMARY OF COMMUNICATIONS AND APPROVALS

The PBNP Manager's Supervisory Staff (on-site review committee) met and discussed this issue at 1330, on December 21, 1992, and concurred with the decision to request this waiver.

An informational notification was also made to NRR and Region III staff at approximately 1430 on December 21, 1992, to discuss this situation and the expected need for a from our license requirements.

We received verbal approval of this request for a waiver at 2141 on December 21, 1992, during our telephone conversation with Mr. Bill Forney and other members of Region III and NRR staff. That approval was contingent upon the submittal of our request in this letter and taking the compensatory action described above.

If you have any questions or desire additional information, please contact us.

Sincerely,

Bob Link / Sarah Peterson

Bob Link
Vice President
Nuclear Power

TGM/jg

cc: NRC Document Control Desk
NRC Resident Inspector
Assistant Director for Reactor Projects, NRR
Public Service Commission of Wisconsin