



**Wisconsin
Electric**
POWER COMPANY

231 W. Michigan, P.O. Box 2046, Milwaukee, WI 53201

(414) 221-2345

VPNPD-92-355

NRC-92-135

November 16, 1992

Document Control Desk
U.S. NUCLEAR REGULATORY COMMISSION
Mail Station P1-137
Washington, DC 20555

Gentlemen:

DOCKETS 50-266 AND 50-301
PUMP AND VALVE INSERVICE TEST PROGRAM
PUMP RELIEF REQUESTS
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

Enclosed is a request for relief (PRR-21) from certain ASME Section XI Code requirements applicable to the inservice testing of our fuel oil transfer pumps, P-070A and P-070B. As a result of a recent telephone conversation on October 7, 1992, between members of our engineering staff and Patricia L. Campbell of NRC we believe that this request is acceptable.

The first part of our request, seeking relief from ASME Section XI-1986, IWP-3100, "Inservice Test Procedure," stems from that article's lack of discrimination between the test parameters useful for testing centrifugal pumps and the test parameters useful for testing positive displacement pumps. In more recent versions of the Code, this has been corrected. Thus, use of a more recent version of the Code, such as ASME OMB-1989, Part 6, is preferable and serves as an acceptable alternative for the inservice testing of Positive Displacement Pumps P-070A and P-070B.

The second part of our request, seeking relief from ASME Section XI-1986, IWP-4110, "Quality," with respect to P-070A and P-070B flow rate instrumentation, follows from your Safety Evaluation Report (SER) of April 17, 1992, on the Point Beach Inservice Test (IST) Program. The SER Technical Evaluation Report (TER), Section 2.1.6, evaluated a previous request (PRR-10) seeking relief from the requirements of IWP-4110, and granted only interim relief for a period of one year.

9211240004 921116
PDR ADDCK 05000266
P PDR

Adm
11

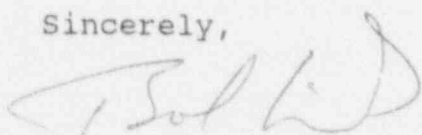
Document Control Desk
November 16, 1992
Page 2

We have completed a review of the instrumentation covered under Relief Request PRR-10, and find that it may be formally withdrawn when relief is granted for P-070A and P-070B flow rate instrumentation. As discussed in our enclosed request, PRR-21, the currently installed flow rate instrumentation for P-070A and P-070B is sufficient to ensure pump operational readiness, and is an acceptable alternative, in this instance, to instrumentation which would meet the requirements of IWP-4110. Upon receipt of approval for Relief Request PRR-21, we will formally withdraw Relief Request PRR-10.

Additionally, in evaluating PRR-21, we believe you should take into consideration our plans to remove Fuel Oil Transfer Pumps P-070A and P-070B from our IST Program in the future. With the currently planned installation of two new emergency diesel generators (EDGs), as discussed in our August 3, 1990, "Response to Inspection Reports 50-266/90-201 and 50-301/90-201," the fuel oil transfer system is expected to undergo extensive modification and upgrade. The function of Fuel Oil Transfer Pumps P-070A and P-070B to supply fuel oil for EDG use will be performed by four new pumps, planned for installation in conjunction with the addition of our two new EDGs. P-070A and P-070B will be removed from the IST Program at the same time as the four new fuel oil transfer pumps are incorporated into the program. At that time, the enclosed relief request, PRR-21, will no longer be necessary and will be formally withdrawn.

Should you have any questions or require any additional information, please do not hesitate to contact us.

Sincerely,



Bob Link
Vice President
Nuclear Power

jg

Enclosures

cc: NRC Resident Inspector
NRC Regional Administrator, Region III
Adele DiBiasio, Brookhaven National Laboratory

RELIEF REQUEST NO. PRR-21

SYSTEM: Fuel Oil Transfer (M-219)

COMPONENTS: Fuel Oil Transfer Pumps, P-070A & P-070B

FUNCTION:

P-070A and P-070B are non-unit specific pumps which transfer fuel oil, as required for emergency diesel generator (EDG) operation, from the emergency fuel tank to the individual diesel fuel oil day tanks.

SECTION XI REQUIREMENTS:

- 1) An inservice test shall be conducted with the pump operating at nominal motor nameplate speed for constant speed drives, and at a speed adjusted to the reference speed for variable speed drives. The resistance of the system shall be varied until either the measured differential pressure or the measured flow rate equals the corresponding reference value. The test quantities shown in Table IWP-3100-1 shall then be measured or observed and recorded as directed in this subsection. Each measured test quantity shall then be compared with the reference value of the same quantity. Any deviations determined shall be compared with the limits given in Table IWP-3100-2 and specified corrective action taken (IWP-3100, "Inservice Test Procedure").
- 2) Instrument accuracy shall be within the limits of Table IWP-4110-1. Station instruments meeting these requirements shall be acceptable. NOTE: Table IWP 4110-1, "Acceptable Instrument Accuracy," delineates an acceptable accuracy of $\pm 2\%$ of full scale for flow rate instruments (IWP-4110, "Quality").

ALTERNATE TESTING:

- 1) P-070A and P-070B are both Crane-Deming gear driven, single speed, rotary gear type positive displacement pumps. For pumps of this type, discharge pressure is independent of suction pressure and is a function only of the pump design. Measuring pump inlet and differential pressure does not provide any meaningful information for evaluating pump performance. Consequently, later editions of the Code do not require the measurement of either inlet or differential pressure for positive displacement pumps.

As opposed to ASME Section XI-1986, IWP-3100, which does not differentiate between positive displacement and centrifugal pumps, the more recent ASME OMB-1989, Part 6, Subsection 5.2, "Test Procedure," shall be used for inservice testing of P-070A and P-070B.

- 2) Instrument accuracy for the measurement of flow rate during inservice testing of P-070A and P-070B shall be within $\pm 3\%$ of full scale, as opposed to $\pm 2\%$ of full scale required by IWP-4110.

BASIS FOR RELIEF:

- 1) As discussed in the Alternate Testing section above, ASME Section XI-1986 does not differentiate between positive displacement and centrifugal pumps when delineating test procedures. Measurement of suction and differential pressures does not provide any meaningful information for evaluating positive displacement pump performance. As discussed above, use of the test procedures outlined in the more recent ASME OMB-1989, Part 6, correctly differentiates between different types of pumps and provides an acceptable alternative to the Section XI Code requirements for assuring pump operational readiness. Therefore, relief may be granted in accordance with 10 CFR 50.55a(a)(3)(i).
- 2) The flow rate instruments used for P-070A and P-070B inservice testing have a range of 0-15 GPM, which ideally places pump reference flow at approximately two-thirds of full scale (approximately 10 GPM). An accuracy of $\pm 3\%$ of full scale translates to ± 0.45 GPM for these instruments, whereas an accuracy of $\pm 2\%$ of full scale, as called out in IWP-4110, would translate to ± 0.30 GPM. The difference of 0.15 GPM is not significant, especially when considering that since these are positive displacement pumps flow rate does not vary. The installed instruments with an accuracy of $\pm 3\%$ of full scale are sufficient in this application to assure pump operational readiness and, thus, relief may be granted in accordance with 10 CFR 50.55a(a)(3)(i).

STATUS:

Submitted to the NRC for review and approval November 16, 1992.