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U. S. NUCLEAR REGULATORY COMMISSION
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Washington, DC 20555

Ladies/Gentlemen:

DOCKETS 50-266 AND 50-301
ASME SECTION XI PRESSURE TEST PROGRAM RELIEF REQUEST PTP-3-07
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

Enclosed is proposed change PTP-3-07 to the ASME Section XI Pressure Test Program for Point Beach Nuclear Plant, Units 1 and 2. This change is associated with the functional pressure test on the diesel fuel oil transfer system. The change requests relief from the required hold time after attaining pressurization to test conditions during performance of this test. Implementation of this request for relief will allow performance of the diesel fuel oil transfer system functional test without being required to establish day tank fuel oil levels outside the design setpoint limits.

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

Sincerely,

Vito A. Kaminskas,

Manager,

Regulatory Services & Licensing

FAF/dms

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cc: NRC Regional Administrator

NRC Resident Inspector

Public Service Commission of Wisconsin

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# DOCKETS 50-266 AND 50-301 POINT BEACL: SECULEAR PLANT ASME SECTION XI PRESSURE TEST PROGRAM RELIEF REQUEST PTP-3-07

## Components:

ASME Class 3, Emergency Diesel Generators G01/02 (Train A) and G03/04 (Train B) fuel transfer system pressure retaining components.

#### Drawings:

ISI Classification Diagram CBD-219, Sheets 1, 2, and 3, "Fuel Oil System."

## ASME Section XI (1986 Edition) Requirements:

System pressure tests required by; Article IWA-5000, IWD-5000, Table IWA-5210-1, and Table IWD-2500-1 Examination Category D-B.

The pressure retaining components within each system boundary shall be subject to periodic system pressure tests as specified in Table IWD-2500-1 Examination Category D-B. For the fuel oil transfer system, as applicable, a system functional pressure test is required to verify operability in systems not required to operate during normal plant operation. A 10-minute holding time is required after attaining the system operating pressure before visual examinations (VT-2) commence.

The boundary subject to test pressurization during a system functional test shall include only those pressure retaining components within the system boundary pressurized under the test mode required during the performance of a periodic system functional test.

# Proposed Alternate Testing:

During the system functional pressure tests associated with the diesel fuel oil transfer system, visual examinations (VT-2) shall commence with "NO" hold time after attaining pressurization to test conditions. The visual examinations shall commence upon pump initiation when the low level actuation setpoint is reached in the day tank. The time required for the pump to replenish day tank inventory is approximately 7 minutes. With two VT-2 examiners, sufficient time exists to complete the required examinations before the transfer pump stops upon receipt of a high level tank indication. The hydraulic circuit subject to visual examinations shall include all exposed piping from the transfer pump discharge to the inlet connection for the day tank and extend up to and include the first normally closed valve in all branch connections associated with the piping required for the system to perform its safety-related function. This method of testing shall be utilized to satisfy all pressure testing requirements of ASME XI.

#### Basis for Relief:

A system functional pressure test is required to be performed on the diesel fuel oil transfer system once each period (40 m. nths). Pressure testing this system as required by ASME XI presents a significant problem. Normal inservice testing of G03 and G04 diesel fuel oil transfer pumps discharges flow to the respective day tank. However, normal inservice testing of the G01 and G02 diesel fuel oil transfer pumps utilizes an instrumented recirculation flow path back to the associated storage tank that does not encompass the portion of piping leading to the day tank. The fuel oil piping supplying G01 and G02 day tanks includes several hundred feet of piping outside of the pump inservice test loop. To satisfactorily perform a functional pressure test, all piping required for the system to perform its safety-related function must be included in the test boundary.

Therefore, the fuel oil piping discharging to the day tanks must be included in the examination boundary. This requires operating the pumps in their normal alignment of discharging to their respective day tank. While operating in this alignment, none of the transfer pumps can remain in service for sufficient duration to achieve the required 10-minute hold time prior to performing the visual examinations. Obtaining 10 minutes of fuel oil transfer system operation plus the time required to perform the visual examination requires manually draining the day tanks to below the design low level setpoint and restoring inventory to a point beyond the design high level setpoint.

This action would create the possibility of overflowing the day tank with potential consequences of environmental risks, fire and/or hazardous conditions for personnel. It should be noted that the day tanks for G03 and G04 are provided with overflow lines. However, continued pump operation could result in tank overflow via the flame arrestors. Given the potential consequences, the actions required to achieve the 10-minute hold time are excessive without a commensurate increase in the level of assurance in the pressure boundary integrity of the piping systems. The monthly diesel surveillance tests when performed in conjunction with a VT-2 of the fuel oil transfer system each inspection period provide adequate assurance that the diesel oil transfer system can perform its safety-related function and ensure that any problems or leakage are identified.