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U S Nuclear Regulatory Commission
ATTN: Document Control Desk
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Prairie Island Nuclear Generating Plant Units 1 and 2
Dockets 50-282 and 50-306
License Nos. DPR-42 and DPR-60

Revisions to Relief Requests Associated with the 4th Interval Inservice Testing Plan
(TAC Nos.- MC4509 and MC4510)

On June 28, 2004, Nuclear Management Company, LLC (NMC) submitted the Prairie Island Nuclear Generating Plant (PINGP) 4th Interval Inservice Testing Plan. On May 19, 2005, NMC and Nuclear Regulatory Commission (NRC) discussed two Relief Requests (Nos. 9 and 10) associated with this Plan. NMC agreed to submit revisions to these two Relief Requests.

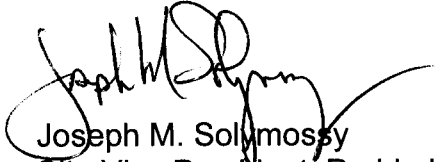
Relief Requests 9 and 10 request relief from the quarterly full flow testing requirements of the residual heat removal (RHR) pumps and the auxiliary feedwater (AFW) pumps because these tests are impractical (as outlined in the bases of the Relief Requests) to perform at power. The Relief Requests proposed that full flow testing be performed at refueling shutdowns instead. The revisions to these Relief Requests propose that the testing be performed when the associated unit evolves through either refueling or cold shutdown conditions since the tests may be performed in either case.

In addition, NMC has modified Relief Request 10 to no longer request relief for 12 Motor Driven Auxiliary Feed Water Pump. The reason this pump could not be tested when the unit is hot was due to the reduction in service life due to thermal shock to the steam generator nozzles. The recently replaced steam generators on Unit 1 have a different nozzle design which eliminates this concern.

Attached to this letter are the two revised Relief Requests (Enclosures 1 and 2).

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.



Joseph M. Solymossy
Site Vice President, Prairie Island Nuclear Generating Plant
Nuclear Management Company, LLC

Enclosures (2)

cc: Administrator, Region III, USNRC
Project Manager, Prairie Island, USNRC
Resident Inspector, Prairie Island, USNR

ENCLOSURE 1

**RELIEF REQUEST #9 REV. 1
REQUEST FOR RELIEF FROM PERFORMING
INSERVICE TESTING REQUIRING FLOW MEASUREMENTS DURING QUARTERLY
GROUP A TESTS**

2 pages follow

**REQUEST FOR RELIEF FROM PERFORMING
INSERVICE TESTING REQUIRING FLOW MEASUREMENTS DURING QUARTERLY
GROUP A TESTS**

COMPONENT IDENTIFICATION

UNIT: 1/2
SYSTEM: Residual Heat Removal (RHR)
PUMPS: 11, 12, 21, 22 Residual Heat Removal Pumps

ASME CODE TEST REQUIREMENT

American Society of Mechanical Engineers (ASME) Operation and Maintenance (OM) Code, 1998 Edition with 2000 Addenda, OMa Subsection ISTB, Inservice Testing of Pumps in Light Water Reactor Nuclear Power Plants, Table ISTB-3000-1 specifies the following parameters be measured during a quarterly Group A test:

- Speed (for variable speed drives)
- Differential pressure
- Flow rate
- Vibration

RELIEF REQUESTED

NMC is requesting relief from the requirement of Table ISTB-3000-1, which requires flow rate be measured during inservice Group A tests.

PROPOSED ALTERNATIVE TESTING

Pursuant to 10 CFR 50.55a(a)(3)(ii), NMC proposes performing tests for these Group A pumps in accordance with the following:

For the Residual Heat Removal Pumps a path exists during Cold and Refueling Shutdowns to measure flow rate. A test meeting the Code requirements for pump differential pressure, flow rate and bearing vibration measurements will be done during Cold and Refueling Shutdown evolutions. During the quarterly pump testing differential pressure and vibration will be measured.

BASIS FOR RELIEF

Flow measurements of the RHR pump require supplying water to the Reactor Coolant System however the RCS pressure is above the shutoff head of the RHR pump so no flow to the RCS is possible when the RCS is pressurized. Consequently, during power operation the only circuit available for quarterly testing of these pumps is the minimum flow recirculation line. The RHR pump recirculation line used during quarterly testing is designed with flow metering but the installed instrumentation cannot be read with sufficient accuracy to meet the Code requirements due to hydraulic fluctuations at the orifice. It is believed that the cause of the hydraulic instability is a combination of pump suction and discharge recirculation, minor cavitation, and the location of the flow orifice which is not located free from local flow obstructions.

The RHR pumps function as Group A pumps only during shutdown conditions. Measurement of differential pressure and vibration during the quarterly pump test ensures that the pump is capable of starting and developing pressure in the event of an accident. Performance of a test that measures pump differential pressure, flow rate and bearing vibration during Cold and Refueling shutdown evolutions provides adequate information to determine and trend pump degradation for pumps that only operate as designed during Cold and Refueling shutdowns.

DURATION RELIEF IS REQUESTED

This alternative would be in effect during the entire 4th Ten Year IST Program Interval.

PRECEDENTS

Generic Letter 89-04 position 9 provided guidance on flow testing of pumps when the only flow path available for quarterly testing is a non-instrumented minimum-flow return line. The generic letter states:

In cases where flow can only be established through a non-instrumented minimum-flow path during quarterly pump testing and a path exists at cold shutdowns or refueling outages to perform a test of the pump under full or substantial flow condition the staff has determined that the increased interval is an acceptable alternative to the Code requirements provided that pump differential pressure, flow rate, and bearing vibration measurements are taken during this testing and that quarterly testing also measures at least pump differential pressure and vibration is continued.

ENCLOSURE 2

**RELIEF REQUEST #10 REV. 1
REQUEST FOR RELIEF FROM PERFORMING
INSERVICE TESTING REQUIRING FLOW MEASUREMENTS DURING QUARTERLY
GROUP A TESTS**

2 pages follow

**REQUEST FOR RELIEF FROM PERFORMING
INSERVICE TESTING REQUIRING FLOW MEASUREMENTS DURING QUARTERLY
GROUP A TESTS**

COMPONENT IDENTIFICATION

UNIT: 1/2
SYSTEM: Auxiliary Feed Water (AFW)
PUMPS: 11 Turbine Driven Auxiliary Feed Water Pump
22 Turbine Driven Auxiliary Feed Water Pump
21 Motor Driven Auxiliary Feed Water Pump

ASME CODE TEST REQUIREMENT

American Society of Mechanical Engineers (ASME) Operation and Maintenance (OM) Code, 1998 Edition with 2000 Addenda, OMa Subsection ISTB, Inservice Testing of Pumps in Light Water Reactor Nuclear Power Plants, Table ISTB-3000-1 specifies the following parameters be measured during a quarterly Group A test:

- Speed (for variable speed drives)
- Differential pressure
- Flow rate
- Vibration

RELIEF REQUESTED

NMC is requesting relief from the requirement of Table ISTB-3000-1, which requires flow rate be measured during inservice Group A tests.

PROPOSED ALTERNATIVE TESTING

Pursuant to 10 CFR 50.55a(a)(3)(ii), NMC proposes performing tests for these Group A pumps in accordance with the following:

For the Auxiliary Feed Water Pumps, a path exists for measuring flow rate during plant startup and shutdown. A test meeting the Code requirements for pump differential pressure, flow rate and bearing vibration measurements will be done during Cold or Refueling Shutdown evolutions. During quarterly pump testing: speed (for the turbine driven pumps), differential pressure and vibration will be measured.

BASIS FOR RELIEF

During power operation the only circuit available for quarterly testing of these pumps is the non-instrumented minimum flow recirculation line. Testing of the AFW pumps using the currently installed instruments would require injecting cold auxiliary feedwater into the steam generators when Unit 2 is on line. Injection of cold auxiliary feedwater causes a thermal shock to the steam generator nozzle for Unit 2, which reduces the nozzle design life. Furthermore, injection of cold water will cause a reactivity addition, making it necessary to compensate for the change. Compliance with the requirements of the Code would require installation of a flow measuring device on the minimum flow recirculation line. For Unit 1, testing of the Turbine Driven AFW pump would require a significant downpower (less than approximately 65% reactor power to ensure Steam Generator pressures are at least 825 psig) to achieve the required steam pressure for full flow testing (205 gpm).

The AFW pumps function as Group A pumps only during shutdown conditions. Measurement of speed (for the turbine driven pumps), differential pressure and vibration during the quarterly pump test ensures that the pump is capable of starting and developing pressure in the event of an accident. Performance of a test that measures speed (for the turbine driven pumps), pump differential pressure, flow rate and bearing vibration during refueling outages provides adequate information to determine and trend pump degradation for pumps that only operate as designed during shutdown conditions.

DURATION RELIEF IS REQUESTED

This alternative would be in effect during the entire 4th Ten Year IST Program Interval.

PRECEDENTS

Generic Letter 89-04 position 9 provided guidance on flow testing of pumps when the only flow path available for quarterly testing is a non-instrumented minimum-flow return line. The generic letter states:

In cases where flow can only be established through a non-instrumented minimum-flow path during quarterly pump testing and a path exists at cold shutdowns or refueling outages to perform a test of the pump under full or substantial flow condition the staff has determined that the increased interval is an acceptable alternative to the Code requirements provided that pump differential pressure, flow rate, and bearing vibration measurements are taken during this testing and that quarterly testing also measures at least pump differential pressure and vibration is continued.