



January 30, 2007

L-MT-07-014
10 CFR 50.90

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Monticello Nuclear Generating Plant
Docket 50-263
License No. DPR-22

License Amendment Request to Revise Technical Specification Surveillance Requirement 3.5.1.3 to Correct the Alternate Nitrogen System Pressure

Pursuant to 10 CFR 50.90, the Nuclear Management Company, LLC (NMC) hereby requests an amendment to the Technical Specifications (TS) for the Monticello Nuclear Generating Plant (MNGP) Renewed Operating License DPR-22. The proposed change would revise MNGP TS Surveillance Requirement 3.5.1.3.b to state that the MNGP Alternate Nitrogen System required pressure for operability is ≥ 410 psig not the ≥ 220 psig currently stated in the TS Surveillance Requirement.

NMC has determined that the current MNGP TS value for the alternate nitrogen system is non-conservative and that the guidance of Nuclear Regulatory Commission (NRC) Administrative Letter 98-10, "Dispositioning of Technical Specifications that are Insufficient to Assure Plant Safety," applies. Therefore, NMC has currently implemented administrative controls to maintain the Alternate Nitrogen System pressure at ≥ 410 psig, and is submitting this License Amendment Request to address this nonconformance.

Enclosure 1 provides the Proposed Change, Background, Technical Analysis, Regulatory Safety Analysis and Environmental Consideration. Enclosure 2 provides the Marked-up MNGP Technical Specification page. Enclosure 3 provides the Re-typed MNGP Technical Specification Page. Enclosure 4 provides the Marked-up MNGP TS Bases page, provided for information only.

The Plant Operations Review Committee has reviewed this application. A copy of this submittal, including the Determination of No Significant Hazards Consideration, is being forwarded to our appointed state official pursuant to 10 CFR 50.91(b)(1).

NMC requests approval of the proposed amendment by the end of January 2008. Once approved, the amendment will be implemented within 60 days.

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

I declare under penalty of perjury that the foregoing is true and correct.

Executed on January 30, 2007

A handwritten signature in black ink, appearing to read "John T. Conway". The signature is fluid and cursive, with a large loop at the end.

John T. Conway
Site Vice President, Monticello Nuclear Generating Plant
Nuclear Management Company, LLC

Enclosures: (4)

cc: Administrator, Region III, USNRC
Project Manager, Monticello, USNRC
Resident Inspector, Monticello, USNRC
Minnesota Department of Commerce

ENCLOSURE 1

Licensee's Evaluation of Proposed Change

<u>Section Title</u>	<u>Page No.</u>
1.0 DESCRIPTION	2
2.0 PROPOSED CHANGE	2
2.1 Change to TS SR 3.5.1.3.b	2
3.0 BACKGROUND	2
3.1 Change to TS SR 3.5.1.3.b	2
4.0 TECHNICAL ANALYSIS	4
4.1 Revision to TS SR 3.5.1.3.b	4
5.0 REGULATORY SAFETY ANALYSIS	4
5.1 No Significant Hazards Consideration	4
5.2 Applicable Regulatory Requirements/Criteria	6
6.0 ENVIRONMENTAL CONSIDERATION	7

ENCLOSURE 1

1.0 Description

Nuclear Management Company, LLC (NMC) hereby requests an amendment to the Technical Specifications (TS) for the Monticello Nuclear Generating Plant (MNGP) Renewed Operating License DPR-22.

NMC has determined that the current MNGP TS value for the alternate nitrogen system is non-conservative and that the guidance of Nuclear Regulatory Commission (NRC) Administrative Letter 98-10, "Dispositioning of Technical Specifications that are Insufficient to Assure Plant Safety," applies. Therefore, NMC has currently implemented administrative controls to maintain the Alternate Nitrogen System pressure at ≥ 410 psig, and is submitting this License Amendment Request to address this nonconformance. This proposed change would revise MNGP TS Surveillance Requirement (SR) 3.5.1.3.b to correctly state that the required pressure at which the Alternate Nitrogen System is determined to be operable is ≥ 410 psig, not the currently stated pressure of ≥ 220 psig.

2.0 Proposed Change

2.1 Change to TS Surveillance Requirement 3.5.1

This change to TS Surveillance Requirement 3.5.1, "ECCS – Operating," is being proposed to correct the requirements for the Alternate Nitrogen System pressure. TS Surveillance Requirement 3.5.1.3 requires verification of limits for Automatic Depressurization System (ADS) pneumatic pressure for both of the required ADS pneumatic supplies.

This proposed change would revise the MNGP TS SR 3.5.1.3.b pressure limit for determining operability of the Alternate Nitrogen System, from ≥ 220 psig to the correct value of ≥ 410 psig.

3.0 Background

3.1 TS Surveillance Requirement 3.5.1.3

In response to NUREG 0737 Item II.K.3.28, that required a long term (100 day) post accident depressurization capability to assure long term shutdown cooling operability, NMC installed separate seismic Class 1 pneumatic sources from high pressure nitrogen bottles to supply two Safety Relief Valves (SRVs). The drywell penetration valves consist of a check valve and a solenoid valve for each SRV. The solenoid valves were capable of holding pressure in either direction of flow and are oriented so that flow from containment will seat the valve plug. Each SRV is supplied

ENCLOSURE 1

by a bottle bank which is sized to handle system leakage and one actuation of each of the two SRVs for a period of seven days.

The modifications provided two separate and independent safety related nitrogen supply trains to the primary containment purge and vent valves and to the reactor building to torus vacuum breaker valves (to maintain containment integrity). This improved the reliability of the primary containment system.

Additional modifications revised the Alternate Nitrogen System to provide a safety related backup pneumatic supply for six of the eight SRVs, all of the inboard MSIVs and the T-ring seals.

The bottled nitrogen supply racks used for the Alternate Nitrogen System are manually checked for adequate supply and pressure during plant operation at a frequency to assure minimum design capacity requirements of the system will be met, when required, assuming worst case leakage rates.

The safety related Alternate Nitrogen System provides an alternate pressure source to equipment required during or following an accident. An instrument nitrogen supply is provided to instruments, controls, and equipment located in the drywell in lieu of instrument air. This is to eliminate a source of oxygen build-up in containment through in-leakage. The Alternate Nitrogen System consists of two separate safety related trains providing a safety related back-up pneumatic source from nitrogen bottle racks located in the turbine building. The location of the bottle racks permits replacement of nitrogen bottles to maintain the nitrogen pressure during normal operation and following an accident. Train A provides a backup pneumatic supply to the T-ring seals of the inboard Primary Containment Atmospheric Control System purge and vent valves, the T-ring seals and actuators of the reactor building to suppression chamber vacuum breakers, and safety relief valves. Train B provides a backup pneumatic supply to the T-ring seals of the outboard Primary Containment Atmospheric Control System purge and vent valves, the inboard main steam isolation valves and safety relief valves. Train B also provides the sole pneumatic supply to the Primary Containment Hard Pipe Vent System. Manifold and system pressures of each train are monitored by pressure switches which give control room annunciation on low pressure. The accumulator bank associated with each ADS (safety relief) valve provides pneumatic pressure for valve actuation. The design pneumatic supply pressure requirements for the accumulator banks are such that, following a failure of the pneumatic supply to the accumulator banks, at least five valve actuations can occur over a ten hour period. The Emergency Core Cooling System (ECCS) safety analysis assumes only one actuation to achieve the depressurization required for operation of the low pressure ECCS.

ENCLOSURE 1

4.0 Technical Analysis

4.1 Revision to TS Surveillance Requirement 3.5.1.3.b

This proposed change would revise MNGP TS Surveillance Requirement (SR) 3.5.1.3.b to correctly state that the required pressure at which the Alternate Nitrogen System is determined to be operable should be ≥ 410 psig, not the currently stated pressure of ≥ 220 psig.

A safety related Alternate Nitrogen System provides an alternate pressure source to equipment required during or following an accident. An instrument nitrogen supply is provided to instruments, controls, and equipment located in the drywell in lieu of instrument air, in order to eliminate a source of oxygen build-up in containment through in-leakage. The Alternate Nitrogen System consists of two separate safety related trains providing a safety related back-up pneumatic source from nitrogen bottle racks located in the turbine building. The location of the bottle racks permits replacement of nitrogen bottles to maintain the nitrogen pressure during normal operation and following an accident. The accumulator bank associated with each ADS (safety relief) valve provides pneumatic pressure for valve actuation. The design pneumatic supply pressure requirements for the accumulator banks are such that, following a failure of the pneumatic supply to the accumulator banks, at least five valve actuations can occur over a ten hour period. The ECCS safety analysis assumes only one actuation to achieve the depressurization required for operation of the low pressure ECCS.

A full nitrogen bottle is pressurized to 2640 psig and the Alternate Nitrogen System instruments have a range from 200 to 3500 psig, therefore this change does not alter a design basis or a safety limit for a parameter established in the MNGP Updated Safety Analysis Report (USAR) or the MNGP renewed facility operating license.

5.0 Regulatory Safety Analysis

5.1 No Significant Hazards Consideration Determination

This proposed change would revise MNGP TS Surveillance Requirement (SR) 3.5.1.3.b to correctly state that the required pressure at which the Alternate Nitrogen System is determined to be operable is ≥ 410 psig, not the currently stated pressure of ≥ 220 psig.

Nuclear Management Company, LLC (NMC) has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

ENCLOSURE 1

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The system operability criteria for the Alternate Nitrogen System pressure is being revised from ≥ 220 psig to ≥ 410 psig to correct an incorrect value that was added to the TS during the conversion from MNGP custom TS to the improved TS. NMC has determined that the current MNGP TS value for the alternate nitrogen system is non-conservative and that the guidance of Nuclear Regulatory Commission (NRC) Administrative Letter 98-10, "Dispositioning of Technical Specifications that are Insufficient to Assure Plant Safety," applies. Therefore, NMC has currently implemented administrative controls to maintain the Alternate Nitrogen System pressure at ≥ 410 psig, and is submitting this License Amendment Request to address this nonconformance. This proposed TS change does not introduce new equipment or new equipment operating modes, nor does the proposed change alter existing system relationships. The proposed change does not affect plant operation, design function or any analysis that verifies the capability of a system, structure or component (SSC) to perform a design function. Further, the proposed change does not increase the likelihood of the malfunction of any SSC or impact any analyzed accident. Consequently, the probability of an accident previously evaluated is not affected.

As stated above this nonconforming condition is currently being controlled by administrative controls to ensure that the verified Alternate Nitrogen System accumulator bank pressure is being maintained ≥ 410 psig. NMC has determined that the current MNGP TS value for the alternate nitrogen system is non-conservative and that the guidance of Nuclear Regulatory Commission (NRC) Administrative Letter 98-10 applies. The proposed change does not increase the likelihood of the malfunction of any SSC or impact any analyzed accident. Consequently, there is no significant increase in the consequences of any accident previously evaluated.

Therefore, the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The verified Alternate Nitrogen System accumulator bank pressure is being maintained ≥ 410 psig. This revision to the system operability criteria for the

ENCLOSURE 1

Alternate Nitrogen System pressure from ≥ 220 psig to ≥ 410 psig is a correction to a value that was inadvertently added to the TS during the conversion from MNGP custom TS to the improved TS. This revision does not change the design function or operation of any SSC. There is no new system component being installed, no construction of a new facility, no performance of a new test or maintenance function. The proposed TS change does not create the possibility of a new credible failure mechanism, or malfunction. The change does not modify the design function or operation of any SSC. Further, the proposed change does not introduce new accident initiators. Consequently, the changes cannot create the possibility of a new or different kind of accident from any accident previously evaluated.

Therefore, the proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed.

3. Does the proposed amendment involve a significant reduction in the margin of safety?

Response: No

The revision to the system operability criteria for the Alternate Nitrogen System pressure from ≥ 220 psig to ≥ 410 psig is a correction to a value that was inadvertently added to the TS during the conversion from MNGP current TS to the improved TS. This change does not exceed or alter a design basis or a safety limit for a parameter established in the MNGP Updated Safety Analysis Report (USAR) or the MNGP renewed facility operating license. Consequently, the change does not result in a reduction in the margin of safety.

Therefore, the proposed amendment does not involve a significant reduction in a margin of safety.

Based on the above, NMC concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

10 CFR 50.36(c)(3), Surveillance Requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

The proposed change would revise the system operability criteria for the Alternate Nitrogen System, from ≥ 220 psig to ≥ 410 psig; this is a correction to a value that

ENCLOSURE 1

was inadvertently added to the MNGP TS during the conversion from MNGP TS to the improved TS.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

6.0 Environmental Consideration

NMC's review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

ENCLOSURE 2

MARKED-UP TECHNICAL SPECIFICATION PAGE

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>M. Two or more low pressure ECCS injection/spray subsystems inoperable for reasons other than Condition C, D, or F.</p> <p><u>OR</u></p> <p>HPCI System and one or more ADS valves inoperable.</p>	M.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.5.1.1 Verify, for each low pressure ECCS injection/spray subsystem, the piping is filled with water from the pump discharge valve to the injection valve.	31 days
SR 3.5.1.2 Verify each ECCS injection/spray subsystem manual, power operated, and automatic valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days
<p>SR 3.5.1.3 Verify ADS pneumatic pressure is as follows for each required ADS pneumatic supply:</p> <p>a. S/RV Accumulator Bank header pressure \geq 88.3 psig; and</p> <p>b. Alternate Nitrogen System pressure is \geq 220 psig.</p> <div style="text-align: center; margin-top: 10px;"> 410 </div>	31 days

ENCLOSURE 3

RETYPE TECHNICAL SPECIFICATION PAGE

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>M. Two or more low pressure ECCS injection/spray subsystems inoperable for reasons other than Condition C, D, or F.</p> <p><u>OR</u></p> <p>HPCI System and one or more ADS valves inoperable.</p>	M.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.5.1.1 Verify, for each low pressure ECCS injection/spray subsystem, the piping is filled with water from the pump discharge valve to the injection valve.	31 days
SR 3.5.1.2 Verify each ECCS injection/spray subsystem manual, power operated, and automatic valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days
<p>SR 3.5.1.3 Verify ADS pneumatic pressure is as follows for each required ADS pneumatic supply:</p> <p>a. S/RV Accumulator Bank header pressure \geq 88.3 psig; and</p> <p>b. Alternate Nitrogen System pressure is \geq 410 psig.</p>	31 days

ENCLOSURE 4

MARKED-UP TECHNICAL SPECIFICATION BASES PAGE
(Provided for Information Only)

BASES

SURVEILLANCE REQUIREMENTS (continued)

also prevent a water hammer following an ECCS initiation signal. One acceptable method of ensuring that the lines are full is to vent at the high points. While the potential for developing voids in the HPCI System exists, the effects of a void have been analyzed and shown to be acceptable. The 31 day Frequency is based on the gradual nature of void buildup in the ECCS piping, the procedural controls governing system operation, and operating experience.

SR 3.5.1.2

Verifying the correct alignment for manual, power operated, and automatic valves in the ECCS flow paths provides assurance that the proper flow paths will exist for ECCS operation. This SR does not apply to valves that are locked, sealed, or otherwise secured in position since these were verified to be in the correct position prior to locking, sealing, or securing. A valve that receives an initiation signal is allowed to be in a nonaccident position provided the valve will automatically reposition in the proper stroke time. This SR does not require any testing or valve manipulation; rather, it involves verification that those valves capable of potentially being mispositioned are in the correct position. This SR does not apply to valves that cannot be inadvertently misaligned, such as check valves. For the HPCI System, this SR also includes the steam flow path for the turbine and the flow controller position.

The 31 day Frequency of this SR was derived from the Inservice Testing Program requirements for performing valve testing at least once every 92 days. The Frequency of 31 days is further justified because the valves are operated under procedural control and because improper valve position would only affect a single subsystem. This Frequency has been shown to be acceptable through operating experience.

SR 3.5.1.3

Verification every 31 days that each ADS pneumatic pressure is within the analysis limits (S/RV Accumulator Bank header pressure ≥ 88.3 psig and Alternate Nitrogen System accumulator bank pressure ≥ 220 psig) ensures adequate air pressure for reliable ADS operation. The accumulator bank associated with each ADS valve provides pneumatic pressure for valve actuation. The design pneumatic supply pressure requirements for the accumulator banks are such that, following a failure of the pneumatic supply to the accumulator banks, at least five valve actuations can occur over a ten hour period (Ref. 10). The ECCS safety analysis assumes only one actuation to achieve the depressurization

410