

August 21, 2003

Mr. David L. Wilson
Site Vice President
Monticello Nuclear Generating Plant
Nuclear Management Company, LLC
2807 West County Road 75
Monticello, MN 55362-9637

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT — ISSUANCE OF
AMENDMENT RE: DRYWELL LEAKAGE AND SUMP MONITORING
DETECTION SYSTEM (TAC NO. MB7945)

Dear Mr. Wilson:

The Commission has issued the enclosed Amendment No. 137 to Facility Operating License No. DPR-22 for the Monticello Nuclear Generating Plant. The amendment consists of changes to the Technical Specifications (TSs) in response to your application of January 29, 2003. This application superceded your previous application of October 8, 2002, as supplemented November 8, 2002.

The amendment revises the drywell leakage and sump monitoring detection section of the current TSs. Specifically, the changes clarify the associated definitions and divide TS 3.6.D/4.6.D, "Coolant Leakage," into two subsections and retitle it "Reactor Coolant System (RCS)." One of the subsections contains the Limiting Condition for Operations (LCOs) for RCS operational leakage, and the other subsection contains the LCOs for the RCS leakage detection instrumentation.

A copy of our related safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

L. Mark Padovan, Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-263

Enclosures: 1. Amendment No. 137 to DPR-22
2. Safety Evaluation

cc w/encls: See next page

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ADAMS Accession No. ML031980275

*SE input provided by memo ** see previous concurrence

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Monticello Nuclear Generating Plant

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March 2003

NUCLEAR MANAGEMENT COMPANY, LLC

DOCKET NO. 50-263

MONTICELLO NUCLEAR GENERATING PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 137

License No. DPR-22

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Nuclear Management Company, LLC (the licensee), dated January 29, 2003, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.2 of Facility Operating License No. DPR-22 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 137 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

L. Raghavan, Chief, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: August 21, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 137

FACILITY OPERATING LICENSE NO. DPR-22

DOCKET NO. 50-263

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

ii
5
126
126a
127

INSERT

ii
5
126
126a
127

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 137 TO FACILITY OPERATING LICENSE NO. DPR-22
NUCLEAR MANAGEMENT COMPANY, LLC
MONTICELLO NUCLEAR GENERATING PLANT
DOCKET NO. 50-263

1.0 INTRODUCTION

By application dated January 29, 2003, the Nuclear Management Company, LLC (NMC), requested changes to the Technical Specifications (TSs) for the Monticello Nuclear Generating Plant. This application superseded NMC's previous application of October 8, 2002, as supplemented November 8, 2002. The proposed amendment would revise the drywell leakage and sump monitoring detection section of the current TSs. Specifically, the changes would clarify the associated definitions and divide TS 3.6.D/4.6.D, "Coolant Leakage," into two subsections and retitle it "Reactor Coolant System (RCS)." One of the subsections would contain the Limiting Condition for Operations (LCOs) for RCS operational leakage, and the other subsection would contain the LCOs for the RCS leakage detection instrumentation.

2.0 REGULATORY EVALUATION

The applicable regulatory requirements and guidelines are as follows:

- Title 10 of the *Code of Federal Regulations* (10 CFR), Sections 50.36, 50.90, 50.91, and 51.22
- NUREG-1433, "Standard Technical Specifications General Electric Plants, BWR/4," Revision 2, dated April 2001

3.0 TECHNICAL EVALUATION

NMC is maintaining a plant-specific TS format (not reformatting the Monticello TSs to be in accordance with NUREG-1433). This safety evaluation (SE) assesses NMC's proposed TS changes to determine if the proposed changes are acceptable.

3.1 Current TS Definitions 1.0.AC, "Identified Leakage," 1.0.AD, "Unidentified Leakage," and Proposed TS Definition 1.0.AE, "Total Leakage" (Change 1)

3.1.1 Proposed TS Changes

NMC proposed revising current TS Definitions 1.0.AC and 1.0.AD, and adding new TS Definition 1.0.AE. These changes would match the proposed changes to TS 3.6.D/4.6.D (see Section 3.2 of this SE), and be generally consistent with NUREG-1433. The current TS 1.0.AC definition for identified leakage is as follows:

1. Reactor coolant leakage into the drywell collection systems, such as pump seal or valve packing leaks, that is captured and conducted to a sump or collection tank, or
2. Reactor coolant leakage into the drywell atmosphere from sources which are specifically located and known not to be Pressure Boundary Leakage, or which do not significantly impair the methods used to detect reactor coolant leakage.

The proposed changes would revise TS Definition 1.0.AC to define identified leakage as follows:

1. Leakage into the drywell, such as that from pump seals or valve packing leaks, that is captured and conducted to a sump or collection tank, or
2. Leakage into the drywell atmosphere from sources that are both specifically located and known either not to interfere with the operation of the leakage detection systems or not to be Pressure Boundary Leakage.

The current TS Definition 1.0.AD defines unidentified leakage as "Unidentified leakage shall be all reactor coolant leakage which is not Identified Leakage." The proposed changes would redefine unidentified leakage as "All leakage into the drywell that is not Identified Leakage." A new TS Definition 1.0.AE would define total leakage to be the "Sum of the Identified and Unidentified Leakage."

3.1.2 NRC Staff Evaluation

The changes to the identified and unidentified definitions clarify that the leakage is not limited to reactor coolant. Leakage will include all leakage into the drywell, not just leakage to the collection systems. NMC proposed using the term "leakage detection systems," and adding a definition for "total leakage" that is consistent with proposed changes to TS 3/4.6.D. The proposed changes are generally more conservative than the current definitions because they include all leakage inside the drywell. They are also necessary to support the proposed TS changes. Therefore, the NRC staff finds the proposed changes acceptable.

3.2 Current TS 3.6.D/4.6.D, "Coolant Leakage" (Change 2)

3.2.1 Proposed TS Changes

NMC proposed revising current TS 3.6.D/4.6.D to change the name from "Coolant Leakage" to "Reactor Coolant System (RCS)." NMC also proposed dividing the TS section into two subsections titled "Operational Leakage," and "RCS Leakage Detection Instrumentation." The TS Table of Contents (TOC) would also be revised, and the TS LCO and Surveillance Requirement (SR) subparagraphs renumbered accordingly.

3.2.2 NRC Staff Evaluation

NMC states that the proposed changes to the TS are needed to clarify the TS and make them more usable and understandable. Dividing current TS Section 3.6.D/4.6.D into two subsections would make it clear which portion pertains to RCS operational leakage and which pertains to

the instrumentation that detects RCS leakage. Additionally, revising the TS TOC supports the proposed changes.

The proposed revisions are editorial in nature. Separating operational leakage LCOs and SRs from leakage-detection instrumentation LCOs and SRs adds clarity and consistency. Therefore, the NRC staff finds the proposed changes acceptable.

The remainder of this SE evaluates NMC's proposed changes using the proposed, renumbered TS LCO and SR subparagraphs, as follows:

<u>Current TS</u>	<u>Proposed TS</u>
3.6.D.1	3.6.D.1.a
3.6.D.1.a	3.6.D.1.a.1)
3.6.D.1.b	3.6.D.1.a.2)
3.6.D.1.c	3.6.D.1.a.3)
3.6.D.1.d	3.6.D.1.a.4)
3.6.D.2	3.6.D.1.b
3.6.D.3	3.6.D.1.c
3.6.D.4	3.6.D.1.d
3.6.D.5	3.6.D.2.a
3.6.D.5.a	3.6.D.2.a.1)
3.6.D.5.b	3.6.D.2.a.2)
3.6.D.6.b	3.6.D.2.b.2)

3.3 Proposed TS LCO 3.6.D.1.a (Change 3)

3.3.1 Proposed TS Changes

NMC proposed deleting the words "based on sump monitoring" in current TS LCO 3.6.D.1 with regard to RCS operational leakage limits.

3.3.2 NRC Staff Evaluation

NMC indicates the proposed changes are necessary to support transferring from the current method of complying with the current "Coolant Leakage" TS (by measuring/monitoring leakage) to the proposed method of complying with the new "Reactor Coolant System" TS (by verifying leakage to be within TS limits). The proposed changes would require observing operational leakage limits regardless of how the leakage is monitored. Thus, the proposed changes would provide for continued verification of being within TS limits.

RCPB leakage is the safety concern associated with leakage into the drywell, as it could indicate RCPB degradation. Since the unidentified leakage rate limits would not change, the proposed change would give added operational flexibility without a corresponding reduction in safety. The proposed TS changes would provide at least the same level of safety as the current TS because the limits would not change. Therefore, the NRC staff finds the proposed changes acceptable.

3.4 Proposed TS SR 4.6.D.1 (Change 4)

3.4.1 Proposed TS Changes

NMC proposed revising current TS SR 4.6.D.1 to delete the requirement to record unidentified and identified leakage rates once per 12 hours using primary containment floor and equipment drain sump monitoring equipment. Instead, the proposed SR would require verifying, every 12 hours, that unidentified leakage, increase in unidentified leakage, and total leakage are within the TS limits.

3.4.2 NRC Staff Evaluation

NMC proposed revising the TS SR to provide for the new method for determining compliance with proposed TS 3.6.D.1.a. The new method would require verifying that the drywell unidentified leakage, increase in unidentified leakage, and total leakage are all within the acceptable limits of TS 3.6.D.1.a. The old method requires recording unidentified leakage and identified leakage every 12 hours using sump monitoring equipment. These changes are necessary to provide continuity and consistency with the overall proposed changes.

The proposed changes are acceptable because RCS leakage can be monitored by a variety of instruments that alarm when leakage is indicated and quantify the various types of leakage. Sump level and flow rate are typically monitored to determine actual leak rates. However, other methods may be used to quantify leakage. Plant operators can look for step changes in conditions, or perform calculations to determine leakage and verify that it remains within TS limits. Operators can use preexisting information, in conjunction with alternate measurements (e.g., drywell pressure and temperature), to do this. The proposed TS changes would provide at least the same level of safety as the current TS since the leakage rate limits would not change. The proposed changes would also provide more operational flexibility than the current TS. The 12-hour SR to verify leakage would not change from the current TS. Therefore, the NRC staff finds the proposed changes acceptable.

3.5 Proposed TS LCO 3.6.D.1.a.1), 3.6.D.1.a.2) and 3.6.D.1.a.3) (Change 5)

3.5.1 Proposed TS Changes

NMC's proposed changes are as follows:

- Add " \leq " to proposed TS LCOs 3.6.D.1.a.1), 3.6.D.1.a.2) and 3.6.D.1.a.3).
- Revise proposed TS LCO 3.6.D.1.a.2) to delete "Any," replace it with "the previous," and add "while in the Run Mode."
- Revise proposed TS LCO 3.6.D.1.a.3) to delete reference to "20 gpm [gallons per minute] Identified Leakage" and replace it with " \leq 25 gpm Total Leakage averaged over the previous 24-hour period."

3.5.2 NRC Staff Evaluation

NMC proposed adding “≤” in front of the leakage limits to clarify that the leakage must be less than or equal to the specified values. The proposed change to include a total-leakage limit, which combines unidentified and identified leakage is consistent with the overall TS changes.

NMC proposed revising the increase in unidentified leakage limit during “the previous” 24-hour period “while in the Run Mode,” and total leakage limit “averaged over the previous 24 hour period,” were also made to be consistent with industry standards.

The proposed revision to add “≤” in front of the leakage limits is acceptable because it would remove the ambiguity associated with the current TS wording, and is essentially cosmetic in nature because it would not change the actual limits. Similarly, the proposed change to a total leakage limit of 25 gpm versus a limit of 20 gpm for identified leakage is also acceptable because it would not change the actual limits (since total leakage combines identified and unidentified leakage). Revising the total-leakage limit to be “averaged over the previous 24 hour period” is acceptable because it would prevent momentary spikes from requiring an unnecessary entry into an action statement. The revised wording for the unidentified leakage increase, which includes the “previous 24 hour period while in the Run Mode,” is also acceptable because temporary changes in leakage rate may occur as a result of transient conditions (e.g., startup). Measurements should be performed during steady-state conditions. Therefore, the NRC staff finds the proposed changes acceptable.

3.6 Proposed TS LCOs 3.6.D.1.b, 3.6.D.1.c, 3.6.D.1.d, 3.6.D.2.a.2), and 3.6.D.2.b.2) (Change 6)

3.6.1 Proposed TS Changes

NMC requested changes to current TS LCOs 3.6.D.2, 3.6.D.3, 3.6.D.4, 3.6.D.5.b and 3.6.D.6.b. The proposed changes included revising the unit shutdown statements for the LCOs to say that the unit should be in hot shutdown within the next 12 hours and in cold shutdown within the following 24 hours if the TS LCO limits are exceeded.

3.6.2 NRC Staff Evaluation

The current TS shutdown action statements require operators to “initiate an orderly shutdown of the reactor and reduce reactor water temperature to less than 212°F [degrees Fahrenheit] within 24 hours.” The proposed changes would make the shutdown requirements of TS LCO 3.6.D.1 and other similar shutdown requirements found elsewhere in the Monticello TSs consistent. The proposed time frames of 12 hours to be in hot shutdown and an additional 24 hours to be in cold shutdown are reasonable (based on operating experience) to reach the required plant conditions from full power conditions in an orderly manner and without challenging the plant safety systems.

Adding an additional 12 hours to reach cold shutdown conditions in the revised TS LCOs is acceptable because this allows for a more orderly plant shutdown. Also, the probability that an imperfection or crack associated with the TS leakage limits would grow significantly within the additional 12 hours is acceptably small. Thus, the additional 12 hours might even provide a small increase in safety because it permits a more orderly plant shutdown. Therefore, the NRC staff finds the proposed changes acceptable.

3.7 Proposed TS LCOs 3.6.D.1.b and 3.6.D.1.c (Change 7)

3.7.1 Proposed TS Changes

NMC proposed changing current TS LCOs 3.6.D.2 and 3.6.D.3 to revise the wording of the initial action statements for leakage in excess of the limits. The proposed changes would also add a clarifying statement to proposed TS LCO 3.6.D.1.c to state “reduce leakage to within limits within four hours or identify that the source of increased leakage is not service sensitive type 304 or type 316 austenitic stainless steel.”

3.7.2 NRC Staff Evaluation

The current initial action statement for TS LCO 3.6.D.2 requires reducing RCS leakage to “within acceptable limits” within 4 hours. The current initial action statement for TS LCO 3.6.D.3 for the increase in unidentified leakage limit says to “identify the source of increased leakage within four hours.” Thus, the proposed changes are necessary because the current TS LCOs are unclear as to what the expectations are once a leakage source is identified. The proposed changes would also enhance TS readability and usability.

The word “acceptable” in the phrase “within acceptable limits” is redundant. Thus, deleting this word is editorial in nature. The new wording “within limits” conveys the proper meaning.

The proposed change to identify that the source of increased leakage is not service-sensitive Type 304 or Type 316 austenitic stainless steel is acceptable because it focuses the leakage investigation on piping that is susceptible to intergranular stress-corrosion cracking (IGSCC), which forms the technical basis for the limit related to increases in unidentified leakage. IGSCC produces tight cracks and the small flow increase limit (2 gpm) is capable of providing an early warning of such deterioration. Verifying that the source of the increased leakage is not Type 304 or Type 316 austenitic stainless steel essentially eliminates IGSCC as a possible cause of the increased leakage. This significantly reduces concerns about crack instability, crack growth, and a failure of the RCPB. Therefore, the NRC staff finds the proposed changes acceptable.

3.8 Proposed TS LCO 3.6.D.1.d (Change 8)

3.8.1 Proposed TS Changes

NMC proposed changing current TS LCO 3.6.D.4 to replace the words “is detected when the corrective actions outlined in 3.6.D.2 and 3.6.D.3 above are taken” with the word “exists.”

3.8.2 NRC Staff Evaluation

Currently, the TS LCO 3.6.D.4 action statement reads, “If any Pressure Boundary Leakage is detected when the corrective actions outlined in 3.6.D.2 and 3.6.D.3 above are taken” The proposed change reads “If any Pressure Boundary Leakage exists” The proposed change enhances the readability, usability, and understanding of the TS. Deleting the references to LCOs 3.6.D.2 and 3.6.D.3 is appropriate because the revisions discussed in Sections 3.6 and 3.7 of this SE (which provided each of the referenced TS subsections with their own evaluation criteria and action statements) make the references redundant. Adding the word “exists” is administrative and is necessary to make the wording grammatically correct.

The proposed changes are acceptable because they are administrative in nature and do not change the technical content and resulting actions of the existing TS. The proposed changes are also necessary to make the associated action statement consistent with the overall changes made in the proposed TS. Therefore, the NRC staff finds the proposed changes acceptable.

3.9 Proposed TS LCO 3.6.D.2.a (Change 9)

3.9.1 Proposed TS Changes

NMC proposed changing current TS LCO 3.6.D.5 to delete the statements “at least one of the leakage measurement instruments associated with each sump,” and “no leak rate measurement instruments associated with a sump are.” NMC proposed replacing these statements with “the Drywell Floor Drain Sump Monitoring System,” and “the Drywell Floor Drain Sump Monitoring System is not,” respectively.

3.9.2 NRC Staff Evaluation

NMC’s proposed change to current TS LCO 3.6.D.5 would delete the requirement to have operable leakage and leak rate monitoring instruments associated with each sump (equipment and floor drain sumps). The proposed change would require an operable drywell floor drain sump monitoring system instead. An operable drywell floor drain sump monitoring system is necessary to quantify unidentified leakage into the drywell. The equipment drain sump monitoring system is not required to monitor unidentified leakage. Therefore, because the equipment drain sump instrumentation is not normally used to detect (and indicate in the control room) a significant degradation (via unidentified leakage measurements) of the RCPB, 10 CFR 50.36 does not require it to be in the TSs. NMC also proposed adding an asterisk to the word “operable.” The asterisk is associated with the change discussed in Section 3.12 of this SE.

The NRC staff considers these changes to be acceptable because of the following:

- They provide additional operational flexibility without a significant reduction in safety.
- They may reduce the number of unnecessary shutdowns due to inoperable drain sump equipment.

For the drywell floor drain sump monitoring system to be considered operable, either the flow or level monitoring portion of the system must be operable. The system consists of a sump discharge flow integrator, one sump level recorder, and one sump fill rate computer point (rate of change). The drywell floor drain sump monitoring system is operable whenever one of these three channels is operable.

An alternate to the drywell floor drain pump monitoring system is the drywell equipment drain sump monitoring system, provided the floor drain sump is overflowing to the equipment drain sump. The system becomes inoperable during periods when the floor drain sump level and flow indications are not capable of being monitored. Once the drywell floor drain sump is overflowing to the equipment drain sump, NMC can use the drywell equipment drain sump monitoring system to quantify leakage (i.e., unidentified leakage) into the floor drain sump. This alternate method gives added flexibility, and safety is not reduced because unidentified leakage is still being monitored and indicated in the control room. Therefore, the NRC staff finds the proposed changes acceptable.

3.10 Proposed TS LCO 3.6.D.2.a.1 (Change 10)

3.10.1 Proposed TS Changes

NMC proposed changing current TS LCO 3.6.D.5.a. Currently, it reads "Perform manual leak rate measurements once per 12 hours and restore a measurement instrument to operable status within 30 days." It would be changed to read "Restore the Drywell Floor Drain Sump Monitoring System to operable status within 30 days."

3.10.2 NRC Staff Evaluation

The proposed change would delete the existing requirement to perform manual leak rate measurements because NMC proposed to redefine the equipment for the drywell monitoring system to incorporate the equipment that would be used to perform a manual leak rate measurement (as discussed in Section 3.9 of this SE). With the revised description of the drywell floor drain sump monitoring system, the monitoring system will remain operable whenever any of the three channels are operable (as discussed in Section 3.9.2).

The proposed change to delete the manual leak rate measurement is necessary because the equipment required to perform such calculations would likely not be available because of the new definition of the drywell floor drain sump monitoring system. However, NMC proposed to add a new requirement for the drywell air particulate monitor to be operable if the drywell floor drain sump monitoring system is inoperable (as discussed in Section 3.11 of this SE). Previously, both the particulate monitor and the sump monitors could be inoperable if manual measurements were performed. When considered in conjunction with the rest of the changes NMC proposed in its January 29, 2003, application, this change essentially provides an equivalent level of safety while adding a significant amount of operational flexibility. This might reduce the number of unnecessary shutdowns. Therefore, the NRC staff finds the proposed changes acceptable.

3.11 Proposed TS LCO 3.6.D.2.c (Change 11)

3.11.1 Proposed TS Changes

NMC proposed adding a new TS LCO 3.6.D.2.c that states, "Any time irradiated fuel is in the reactor vessel and reactor water temperature is above 212°F at least one channel of the required leakage detection instrumentation shall be operable. If all channels of both systems (Drywell Floor Drain Sump Monitoring System and drywell particulate radioactivity monitoring system) are inoperable, restore at least one channel of the required leakage detection instrumentation to operable status within 1 hour, or be in Hot Shutdown within the next 12 hours and in Cold Shutdown within the following 24 hours."

3.11.2 NRC Staff Evaluation

This proposed change would provide TS actions if all the required RCS leakage detection instrumentation is inoperable. If all channels of both systems are inoperable, there is no means to detect leakage using TS instrumentation. NMC's proposed change is acceptable because it is more conservative than the existing TS. The change adds a new LCO which requires at least one channel of the RCS leakage detection instrumentation to be available for monitoring potential leakage. Therefore, the NRC staff finds the proposed changes acceptable.

3.12 Proposed TS LCOs 3.6.D.2.a and 3.6.D.2.b (Change 12)

3.12.1 Proposed TS Changes

NMC proposed adding a footnote (asterisk) to current TS LCO 3.6.D.6 that states, "A mode change is allowed when this system is inoperable." It would apply when either the drywell floor drain sump monitoring system or the drywell particulate radioactivity monitoring system is inoperable. It would not apply when both of these systems are simultaneously inoperable.

3.12.2 NRC Staff Evaluation

The proposed change would clarify that a mode change is allowed if either of the above monitoring systems is inoperable. This change is acceptable because other instrumentation (e.g., the drywell particulate radioactivity monitoring system) is available to monitor RCS leakage if the drywell floor drain sump monitoring system is inoperable. Although the drywell particulate radioactivity monitoring system cannot quantify leakage, it will indicate changes in RCS leakage. Additionally, if the drywell particulate radioactivity monitoring system is inoperable, other instrumentation (e.g., the drywell floor drain sump monitoring system) is available to monitor and quantify RCS leakage. Furthermore, drywell pressure and temperature monitors can provide other indications of a change in RCS leakage. Thus, other instrumentation is available to monitor RCS leakage and a mode change should be allowed. Allowing a mode change under these conditions is consistent with industry practice. Therefore, the NRC staff finds the proposed changes acceptable.

3.13 Proposed TS SR 4.6.D.2 (Change 13)

3.13.1 Proposed TS Changes

NMC proposed changes to the wording of the current TS SR 4.6.D.2 which specifies the SRs for the RCS leakage detection systems. Currently, the TS SR states that "The reactor coolant system leakage detection systems shall be demonstrated OPERABLE by:" NMC proposes to revise this to read "RCS leakage detection instrumentation shall be demonstrated OPERABLE by:" Also, NMC proposes to change TS SR 4.6.D.2.b from "Primary containment sump leakage measurement system - performance of a sensor check once per . . ." to "Required leakage detection instrumentation - perform a sensor check once per . . ." NMC proposed other minor grammatical changes for consistency.

3.13.2 NRC Staff Evaluation

The proposed changes are necessary to be consistent with the rest of the TS changes. The proposed changes are acceptable because they are basically editorial in nature. Therefore, the NRC staff finds the proposed changes acceptable.

3.14 Proposed TS SR 4.6.D.2.b (Change 14)

3.14.1 Proposed TS Changes

NMC proposes adding a new SR to current TS 4.6.D.2.b requiring a "channel function test** (flow instruments only) at least monthly." NMC also proposes adding a footnote (the double asterisk) which states "A functional test of this instrument means injection of a simulated signal

into the instrument (not primary sensor) to verify the proper instrument channel response alarm and/or initiating action.”

3.14.2 NRC Staff Evaluation

This proposed change would require monthly functional testing of the required leakage detection flow instrumentation. This functional test, along with the sensor check and channel calibration, would help ensure that the required leakage detection sump instrumentation will operate with a high degree of reliability. This test would only be performed on the flow instruments because they are the only instruments that can be functionally tested monthly. Level instrumentation, with the exception of the recorders, is inaccessible during power operation. The SRs that help ensure the reliability of the primary containment atmosphere particulate radioactivity monitoring systems are addressed in current (and proposed) TS 4.6.D.2.a. This TS SR remains essentially unchanged, except for a minor grammatical revision. The addition of the footnote is necessary to prevent a potential conflict with TS definition 1.0.E, “Instrument Functional Test.” It would also clarify that a functional test at the flow sensor cannot be performed while at power because of the location of the sensor.

The addition of a monthly functional test for the required leakage detection flow instruments is acceptable because it would provide an additional means of ensuring that the required sump flow monitoring instrumentation is performing properly. It is, therefore, an enhancement with respect to safety. In addition to the existing sensor check once per 12 hours, and the calibration check at least once per cycle, this test would give added assurance that at least part of the circuitry is performing as designed. It is also consistent with similar notes elsewhere in the Monticello TSs (e.g., TS Table 4.2.1, Note 5). Therefore, the NRC staff finds the proposed changes acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Minnesota State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes SRs. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding (68 FR 18279). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (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.

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