UNITED STATES NUCLEAR REGULATORY COMMISSION

NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT

Docket No. 50- 263

REQUEST FOR AMENDMENT TO
OPERATING LICENSE NO. DPR- 22

(License Amendment Request Dated April 15, 1977)

Northern States Power Company, a Minnesota corporation, requests authorization for changes to the Technical Specifications as shown on the attachments labeled Exhibit A and Exhibit B. Exhibit A describes the proposed changes along with reasons for the change. Exhibit B is a set of Technical Specification pages incorporating the proposed changes.

This request contains no restricted or other defense information.

NORTHERN STATES POWER COMPANY

By L. J. Wachter
L J Wachter
Vice President, Power Production &
System Operation

On this 15th day of April, 1977, before me a notary public in and for said County, personally appeared L J Wachter, Vice President, Power Production & System Operation, and first being duly sworn acknowledged that he is authorized to execute this document in behalf of Northern States Power Company, that he knows the contents thereof and that to the best of his knowledge, information and belief, the statements made in it are true and that it is not interposed for delay.

Denise E. Halvorson

DENISE E. HALVORSON
NOTARY PUBLIC - MINNESOTA
HENNEPIN COUNTY
My Commission Expires Oct. 10, 1981

EXHIBIT A

MONTICELLO NUCLEAR GENERATING PLANT
DOCKET NO. 50-263

LICENSE AMENDMENT REQUEST
DATED APRIL 15, 1977

PROPOSED CHANGES TO TECHNICAL SPECIFICATIONS
APPENDIX A OF
PROVISIONAL OPERATING LICENSE DPR-22

Pursuant to 10CFR50.59, the holders of Provisional Operating License DPR-22 hereby propose the following changes to the Appendix A Technical Specifications. Related changes proposed in our License Amendment Request Dated November 5, 1976 have been incorporated in this submittal, superceding the November request; however, the November document must be consulted for supporting information for those changes. Certain pages identified below as containing proposed changes are also subject to unrelated changes by License Amendment Request Dated January 30, 1976 as revised May 4, 1976. The latter changes are not incorporated into this submittal; they should be treated independently.

PROPOSED CHANGES

1. Specifications 3.7.A.1 and 4.7.A.1 (pages 139 and 140) - These specifications have been re-structured as shown in Exhibit B without changing the requirements in any way. This provides consistency with the format of other specifications, makes it easier to associate each surveillance requirement with the respective limiting condition for operation and replaces the undefined term "nuclear system" with alternate wording supported by the existing bases.

2. Specifications 3.7.A.1.f and 4.7.A.1.f (page 140) and Bases (page 157A) - The proposed wording shown in Exhibit B has been added to specify and discuss suppression chamber water volume indication operability and calibration requirements.

3. Specification 3.7.A.5.a (page 147A) - Remove the obsolete phrase, "After completion of the startup test program and demonstration of plant electrical output".

4. Specification 3.7.A.7.e (page 147B) and Bases (page 159) - A provision has been added which would remove the drywell to suppression chamber differential pressure requirement for planned safety/relief valve testing.

5. Specifications 3.7.A.7.d and 4.7.A.7.b (page 147B) and Bases (page 159) - The proposed wording shown in Exhibit B has been added to specify and discuss drywell to suppression chamber differential pressure indicator operability and calibration requirements.

6. Bases 3.7.A (page 156) - The reference to a control rod worth of 1.5% delta k has been replaced with an increment of rod worth of 1.3% delta k. (This Bases change was inadvertently omitted when the same change was issued for Specification 3.3.B.3 (a) on November 27, 1973.)

7. Bases 3.7.A (page 158A) - Change the words on the top line from "3/4 inch opening of any one valve or .08 in opening of all ten valves" to read, "one inch opening of any valve or 0.1 inch opening for all ten valves." (This proposed change was inadvertently omitted from an earlier change request. It should have been included in changes issued on February 26, 1975 to make the Bases consistent with the analysis supporting the change to the specifications.)

8. Specification 3.7/4.7 and Bases (pages 139 through 167) - There are numerous minor format changes proposed throughout these pages as shown in Exhibit B, in addition to the more significant changes identified above, to make the specifications easier to use through application of a consistent format.

REASONS FOR CHANGE

Proposed Changes 1, 3 and 8 - These changes re-structure and/or re-format the existing wording for easier readability and application. There are no inherent changes in the requirements of the specifications.

Proposed Changes 2 and 5 - These changes propose limiting conditions for operation and surveillance requirements for operation and surveillance requirements for instrumentation as requested in Mr Karl R Goller's February 4, 1977 letter. We do not share in the NRC opinion that Technical Specifications are appropriate for this type of instrumentation. The parameters monitored, suppression chamber water volume and drywell to suppression chamber differential pressure, do not experience rapid changes during normal operation. They represent the condition of stagnant, confined masses of water and gas. Standard practice for similar situations is to require that a parameter periodically be verified to be within the Technical Specification limit. Since the parameters in question are not used to initiate automatic action, it is irrelevant what method or instrument is used, as long as the parameter can be shown to be within the specified limit. Requiring the periodic check to verify conformance to limits, by itself, inherently requires that some acceptable means must exist to monitor a parameter. We also question the NRC staff technical position that instrument sticking or drifting should be addressed by requiring operability of redundant channels of instrumentation. If these problems do in fact exist, we believe that they should be addressed directly through improved surveillance techniques and a review of the application of instrumentation. Nevertheless, we have proposed limiting conditions for operation and surveillance requirements should you remain convinced that such requirements are appropriate.

A question has also arisen whether the suppression chamber water volume should be specified in terms of volume or level. The proposed Specification maintains a volume criteria, reflecting our position that volume is more correct than level. The initial plant design specified the minimum water volume required as a heat sink in the event of a design basis loss of coolant accident and a minimum volume to be consistent with test data available at the time. Subsequent testing and re-calculations have verified the suppression chamber integrity for the range of volumes specified, including the effect of the drywell to suppression chamber differential pressure. Our objection to converting from a volume to a level specification is as follows:

1. The change would simply be a matter of "optics"; the water volume would only be expressed in different units.
2. The volume is the basic requirement; secondary analyses use that volume expressed in terms of level, downcomer submergence, etc. to verify that other conditions are acceptable. Specifying level would lose sight of the basic requirement.
3. Volume is not affected by containment differential pressure while level is affected. Including this effect would unnecessarily complicate the Technical Specifications. Omitting the effect would either allow operation within Technical Specification limits but outside of the analyzed range or prevent operation over the entire analyzed range through unduly restrictive Technical Specification limits.
4. Changing the units in the Specification does not result in an improvement in safety. Making such a change introduces the potential for confusion and error as the change is incorporated into surveillance procedures, operating instructions, operational checklists and operator training.

Proposed Change 4 - An addition has been proposed, beyond the November 5, 1976 change request, to conveniently allow for special planned tests of safety/relief valves without processing a formal Technical Specification change.

Proposed Changes 6 and 7 - These changes affect the Bases only. In both cases the reason for the change was presented earlier when the corresponding Specifications were changed.

SAFETY EVALUATION

Proposed Changes 1, 3, 6, 7 and 8 - These proposed changes only make editorial changes and correct previous omissions. They do not affect the intent of any Specifications. Therefore, they have no affect on plant safety.

Proposed Changes 2 and 5 - Instrumentation is presently in place to monitor suppression chamber water volume and drywell to suppression chamber differential pressure. These proposed changes add limiting conditions for operation and surveillance requirements on the instrumentation. As stated in the proposed Specification, one of two redundant indicators may be out of service for 30 days and both indicators may be out of service for surveillance and maintenance for a period of time equal to the interval between surveillance checks of the parameter. These indicators do not initiate any automatic action; they are of an application different from most other instrumentation required by the Technical Specifications. Being redundant only provides the benefit of comparing one channel against another. Inoperability of one channel for up to 30 days is therefore reasonable. The parameters in question do not change rapidly during operation. This fact, coupled with the low probability that a loss of coolant accident occurs during a time when the parameter is outside of the specified limit, supports the fact that a check of the two parameters is required only once per day and once per shift, respectively. Allowing both channels out of service for the same interval is commensurate with the application. An annual calibration frequency is consistent with industry standards applied to similar application of analog transmitter devices.

Proposed Change 4 - Insufficient details of planned safety/relief valve tests are available for a safety evaluation at this time. Sufficient information will be provided for an NRC Staff safety evaluation supporting the differential pressure exemption in sufficient time prior to each such exemption.

EXHIBIT B

LICENSE AMENDMENT REQUEST DATED APRIL 15, 1977

This exhibit consists of the following pages revised or added to incorporate all of the proposed Technical Specification Changes:

139
140
147A
147B (Newly created in 11/5/77 License Amendment Request)
148
156
157
157A
158
158A
158B
159
160
161
161A
165
167