NMC
Committed to Nuclear Excellence

Monticello Nuclear Generating Plant
2807 West County Road 75
Monticello, MN 55362-9637

Operated by Nuclear Management Company LLC

August 31, 2000

10 CFR Part 50
Section 50.90

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

MONTICELLO NUCLEAR GENERATING PLANT
Docket No. 50-263 License No. DPR-22

Supplement to Revision to Technical Specification Administrative Controls and Other Miscellaneous Changes

On May 4, 2000, Northern States Power Company (now Nuclear Management Company - NMC) submitted a request for a change in the Technical Specifications, Appendix A of the Operating License for the Monticello Nuclear Generating Plant. On August 7, 2000, the NRC issued Amendment 110 to the Monticello Technical Specifications that affected several of the same pages proposed to be revised by our May 4, 2000 submittal. This supplement retransmits Exhibits B and C incorporating the changes of Amendment 110. All remaining Exhibit B and C, May 4, 2000 submitted pages are included even if they were unaffected by Amendment 110.

One additional change is included to clarify proposed new Sections 4.0.D and 4.0.E. Proposed Sections 4.0.D and 4.0.E use the phrase "specified frequency" as does Standard Technical Specifications NUREG-1433. However, the Monticello Custom Technical Specifications (CTS) do not define "specified frequency." The equivalent CTS phrase is "time interval" as used in Section 4.0.B. Therefore, it is proposed in this supplement to change the proposed wording of Section 4.0.D from "its specified frequency" to "the extended time interval allowed by 4.0.B." In Section 4.0.E, "specified frequency" will be changed to "time interval." This does not change the intent of our original submittal. Therefore, the original No Significant Hazards Consideration remains valid.

Exhibit B contains the current Technical Specification pages marked up with the proposed changes. Exhibit C contains revised Monticello Technical Specification pages.

A001

This submittal does not contain any new NRC commitments and does not modify any prior commitments. Please contact Sam Shirey, Sr. Licensing Engineer, at (763) 295-1449 if you require additional information related to this request.

This letter contains no restricted or other defense information.

NSP requests a period of up to 45 days following receipt of this license amendment to implement the changes.

by Byron D. Day

Byron D. Day
Plant Manager
Monticello Nuclear Generating Plant

On this 31st day of August 2000 before me a notary public in and for said County, personally appeared Byron D. Day, Plant Manager, Monticello Nuclear Generating Plant, and being first duly sworn acknowledged that he is authorized to execute this document on 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.

Samuel I. Shirey
Notary

SAMUEL I. SHIREY
NOTARY PUBLIC - MINNESOTA
My Comm. Exp. Jan. 31, 2005

c: Regional Administrator-III, NRC
NRR Project Manager, NRC
Resident Inspector, NRC
Minnesota Department of Commerce

Attachments: Exhibit B – Current Technical Specification Pages Marked Up with Proposed Changes
Exhibit C – Revised Technical Specification Pages

Exhibit B

MONTICELLO NUCLEAR GENERATING PLANT

Supplement to Revision to Technical Specification Administrative Controls and Other Miscellaneous Changes

Current Technical Specification Pages Marked Up with Proposed Changes

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253 (New page based on Section 5.5.11 of NUREG-1433.)

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Change (1)

4.0 SURVEILLANCE REQUIREMENTS

A. The surveillance requirements of this section shall be met. Each surveillance requirement shall be performed at the specified times except as allowed in B and C below.

B. Specific time intervals between tests may be extended up to 25% of the surveillance interval to accommodate normal test schedules with the exception that, the intervals between tests scheduled for refueling shutdowns shall not exceed two years.

C. Whenever the plant condition is such that a system or component is not required to be operable the surveillance testing associated with that system or component may be discontinued. Discontinued surveillance tests shall be resumed less than one test interval before establishing plant conditions requiring operability of the associated system or component.

Supplement 1

The extended Time interval allowed by 4.0.B

D. *If it is discovered that a surveillance was not performed within ~~its specified frequency~~, then the affected equipment shall be declared inoperable.*

E. *Compliance with 4.0.D may be delayed, from the time of discovery, up to 24 hours or up to the limit of the ~~specified frequency~~, whichever is less. This delay period is permitted to allow performance of the surveillance.*

Time interval

(3) including the plant-specific titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications

6.0 ADMINISTRATIVE CONTROLS

6.1 Organization

(3)

(3)

A. The Plant Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for the safe operation and maintenance of the plant. During periods when the Plant Manager is unavailable, this responsibility may be delegated to other qualified supervisory personnel.

The Shift Supervisor (or, a designated individual during periods of absence from the control room and shift supervisor's office) shall be responsible for the control room command function.

B. Offsite and Onsite Organizations

Onsite and offsite organizations shall be established for plant operation and corporate management, respectively. The onsite and offsite organizations shall include positions for activities affecting plant safety.

1. Lines of authority, responsibility and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, function descriptions of department responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements are documented in corporate and plant procedures, or the Updated Safety Analysis Report or the Operational Quality Assurance Plan.

2. A corporate officer with direct responsibility for the plant shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining and providing technical support to the plant to ensure nuclear safety. This position has the responsibility for the Fire Protection Program.

3. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

C. Plant Staff

1. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.1.1.

2. At least one licensed operator shall be in the control room when fuel is in the reactor.

3. At least two licensed operators shall be present in the control room during cold startup, scheduled reactor shutdown, and during recovery from reactor trips.

4. An individual qualified in radiation protection procedures shall be onsite when fuel is in the reactor.

5. All alterations of the reactor core shall be directly supervised by a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.

6. A fire brigade of at least five members shall be maintained onsite at all times.* The fire brigade shall not include the three members of the shift organization required for safe shutdown of the reactor from outside the control room.

7. The ~~General Superintendent, Operations~~ operations manager shall be formerly licensed as a Senior Reactor Operator or hold a current Senior Reactor Operator License.

8. At least one member of plant management holding a current Senior Reactor Operator License shall be assigned to the plant operations group on a long term basis (approximately two years). This individual will not be assigned to a rotating shift.

(3)

D. Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the ~~General Superintendent Radiation Services~~ radiation protection manager or designated health physicist (8) who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, (2) the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents, and (3) the ~~General Superintendent, Operations~~ operations manager who shall meet the requirement of ANSI N18.1-1971 except that NRC license requirements are as specified in Specification 6.1.C.7. The training program shall be under the direction of a designated member of Nuclear Management Company, LLC management.

* Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of Fire Brigade members provided immediate action is taken to restore the Fire Brigade to within the minimum requirements.

e. Shift Technical Advisor (STA) and Shift Emergency Coordinator (SEC) onsite rest time periods shall not be considered as hours worked when determining the total work time for which the above limitations apply.

2. Any deviation from the above guidelines shall be authorized by the Plant Manager or designee, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. During plant emergencies the Emergency Director shall have this authority. Controls shall be included in the procedures such that individual overtime shall be reviewed monthly to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not allowed.

TABLE 6.1.1
MINIMUM SHIFT CREW COMPOSITION (Note 1)

CATEGORY	APPLICABLE PLANT CONDITIONS	
	SHUTDOWN OR REFUELING MODE AND <212°F	STARTUP OR RUN MODE (Note 4) OR ≥212°F
No. Licensed Senior Operators (LSO)	1 (Note 2)	2 (Note 3, 5)
Total No. Licensed Operators (LSO & LO)	2	4
Total No. Licensed and Unlicensed Operators	3	6

Notes:

1. Shift crew composition may be one less than the minimum requirements for a period of time not to exceed two hours in order to accommodate an unexpected absence of one duty shift crew member provided immediate action is taken to restore the shift crew composition to within the minimum requirements specified.
2. Does not include the licensed Senior Reactor Operator, or Senior Reactor Operator Limited to Fuel Handling, supervising alterations of the reactor core.
3. One LSO shall be in the control room or the shift supervisor's office at all times when the reactor is in the Startup or Run Mode or reactor coolant temperature is greater than or equal to 212°F. At least 50% of the time, an LSO shall actually be in the control room proper when the reactor is in the Startup or Run Mode or reactor coolant temperature is greater than or equal to 212°F.
4. Except for momentary switching to Startup Mode for testing.
5. One LSO position shall be filled by an individual who meets the qualifications of a Shift Technical Advisor as defined in Section 6.1.D(2). If a qualified individual to staff the combined LSO/STA position is not available, a dedicated Shift Technical Advisor shall be on duty, in addition to two licensed senior operators.

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6.2 Review and Audit

Organizational units for the review and audit of facility operations shall be constituted and have the responsibilities and authorities outlined below:

A. Safety Audit Committee (SAC)

The Safety Audit Committee provides the independent review of plant operations from a nuclear safety standpoint. Audits of plant operation are conducted under the cognizance of the SAC.

1. Membership

a. The SAC shall consist of at least five (5) persons.

b. The SAC Chairman shall be a Nuclear Management Company, LLC representative, not having line responsibility for operation of the plant, appointed by the corporate officer with direct responsibility for the plant. Other members shall be appointed by the corporate officer with direct responsibility for the plant or by such other person as he may designate. The Chairman shall appoint a Vice Chairman from the SAC membership to act in his absence.

c. No more than two members of the SAC shall be from groups holding line responsibility for operation of the plant.

d. A SAC member may appoint an alternate to serve in his absence, with concurrence of the Chairman. No more than one alternate shall serve on the SAC at any one time. The alternate member shall have voting rights.

2. Qualifications

a. The SAC members should collectively have the capability required to review activities in the following areas: nuclear power plant operations, nuclear engineering, chemistry and radiochemistry, metallurgy, instrumentation and control, radiological safety, mechanical and electrical engineering, quality assurance practices, and other appropriate fields associated with the unique characteristics of the nuclear power plant.

b. When the nature of a particular problem dictates, special consultants will be utilized, as necessary, to provide expert advice to the SAC.

3. Meeting Frequency

The SAC shall meet on call by the Chairman but not less frequently than twice a year.

4. Quorum

a. No less than a majority of the permanent members or their alternates, including the SAC Chairman or Vice Chairman.

b. No more than a minority of the quorum shall be from groups holding line responsibility for the operation of the plant.

5. Responsibilities - The following subjects should be reported to or reviewed by the SAC:

a. Written safety evaluations of (1) changes in the facility, (2) changes to procedures, and (3) tests or experiments completed without prior Commission approval under the provisions of 10 CFR 50.59 to verify that such changes, tests or experiments did not involve a change in the Appendix A Technical Specifications or an unreviewed safety question as defined in 10 CFR 50.59.

b. Proposed changes to procedures, changes in the facility, and tests and experiments which may involve a change in the Appendix A Technical Specifications or an unreviewed safety question as defined in 10 CFR 50.59. Matters of this kind shall be referred to the SAC following their review by the onsite operating organization.

c. Proposed changes in Appendix A Technical Specifications or proposed license amendments relating to nuclear safety.

d. Violations of applicable codes, regulations, orders, Appendix A Technical Specifications, and license requirements or internal procedures or instructions having nuclear safety significance.

e. Significant operating abnormalities or deviations from normal and expected performance of plant safety-related structures, systems, or components.

(4)

f. Investigation of all Reportable Events and Events requiring Special Reports to the Commission.

g. Revisions to the Facility Emergency Plan, the Facility Security Plan, and the Fire Protection Program.

h. Operations Committee minutes to determine if matters considered by that Committee involve unreviewed or unresolved safety questions.

i. Other nuclear safety matters referred to the SAC by the Operations Committee, plant management or company management.

j. All recognized indications of an unanticipated deficiency in some aspect of design or operation of safety-related structures, systems, or components.

k. Reports of special inspections and audits conducted in accordance with specification 6.3.

l. Changes to the Offsite Dose Calculation Manual (ODCM).

m. Review of investigative reports of unplanned releases of radioactive material to the environs.

6. Audit - The operation of the nuclear power plant shall be audited formally under the cognizance of the SAC to assure safe facility operation.

a. Audits of selected aspects of plant operation, as delineated in ANSI N18.7-1976 as modified by the Operational Quality Assurance Plan, shall be performed with a frequency commensurate with their nuclear safety significance and in a manner to assure that an audit of all nuclear safety-related activities is completed within a period of two years. The audits shall be performed in accordance with appropriate written instructions and procedures.

b. Audits of aspects of plant radioactive effluent treatment and radiological environmental monitoring shall be performed as follows:

1. Implementation of the Offsite Dose Calculation Manual and quality controls for effluent monitoring at least once every two years.
2. Implementation of the Process Control Program for solidification of radioactive waste at least once every two years.
3. The Radiological Environmental Monitoring Program and the results thereof, including quality controls, at least once every year.

c. Periodic review of the audit program should by performed by the SAC at least twice a year to assure its adequacy.

d. Written reports of the audits shall be reviewed by the corporate officer with direct responsibility for the plant, by the SAC at a scheduled meeting, and by members of Management having responsibility in the areas audited.

(4)

7. Authority

   The SAC shall be advisory to the corporate officer with direct responsibility for the plant.

8. Records

   Minutes shall by prepared and retained for all scheduled meetings of the Safety Audit Committee. The minutes shall be distributed within one month of the meeting to the corporate officer with direct responsibility for the plant, the Plant Manager, each member of the SAC, and others designated by the Chairman or Vice Chairman. There shall be a formal approval of the minutes.

9. Procedures

   A written charter for the SAC shall be prepared that contains:

   a. Subjects within the purview of the group.

   b. Responsibility and authority of the group.

   c. Mechanisms for convening meetings.

   d. Provisions of use of specialists or subgroups.

   e. Authority to obtain access to the nuclear power plant operating record files and operating personnel when assigned audit functions.

   f. Requirements for distribution of reports and minutes prepared by the group to others in the Nuclear Management Company, LLC Organization.

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B. Operations Committee (OC)

1. Membership

The Operations Committee shall consist of at least six (6) regular members drawn from the key supervisors of the onsite supervisory staff. The Plant Manager shall serve as Chairman of the OC and shall appoint a regular member to act as Vice Chairman in his absence. Alternates to the regular members shall be designated in writing by the Chairman, or Vice Chairman in the Chairman's absence, to serve on a temporary basis. No more than two alternates shall participate as voting members of the Operations Committee at any one time.

2. Meeting Frequency

The Operations Committee will meet on call by the Chairman or as requested by individual members and at least monthly.

3. Quorum

A quorum shall include a majority of the membership, including the Chairman or Vice Chairman.

4. Responsibilities - The following subjects shall by reviewed by the Operations Committee:

a. Proposed tests and experiments and their results.

b. Modifications to plant systems or equipment as described in the Updated Safety Analysis Report and having nuclear safety significance or which involve an unreviewed safety question as defined in 10 CFR 50.59.

c. Proposals which would effect permanent changes to normal and emergency operating procedures and any other proposed changes or procedures that are determined by the Plant Manager to affect nuclear safety.

d. Proposed changes to the Technical Specifications or operating license.

e. All reported or suspected violations of Technical Specifications, operating license requirements, administrative procedures, or operating procedures. Results of investigations, including evaluation and recommendations to prevent recurrence, will be reported, in writing, to the corporate officer with direct responsibility for the plant and to the Chairman of the Safety Audit Committee.

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f. Investigation of all Reportable Events and Events requiring Special Reports to the Commission.

g. Drills on emergency procedures (including plant evacuation) and adequacy of communication with off-site support groups.

h. All procedures required by these Technical Specifications, including implementing procedures of the Emergency Plan and the Security Plan (except as exempted in Section 6.5.F), shall be reviewed with a frequency commensurate with their safety significance but at an interval of not more than two years.

i. Perform special reviews and investigations, as requested by the Safety Audit Committee.

j. Review of investigative reports of unplanned releases of radioactive material to the environs.

k. All changes to the Process Control Program (PCP) and the Offsite Dose Calculation Manual (ODCM).

5. Authority

The OC Shall be advisory to the Plant Manager. In the event of disagreement between the recommendations of the OC and the Plant Manager, the course determined by the Plant Manager to be the more conservative will be followed. A written summary of the disagreement will be sent to the corporate officer with direct responsibility for the plant and the Chairman of the SAC for review.

6. Records

Minutes shall be recorded for all meetings of the OC and shall identify all documentary material reviewed. The minutes shall be distributed to each member of the OC, the Chairman and each member of the Safety Audit Committee, the corporate officer with direct responsibility for the plant and others designated by OC Chairman or Vice Chairman.

7. Procedures

A written charter for the OC shall be prepared that contains:

a. Responsibility and authority of the group.

b. Content and method of submission of presentations to the Operations Committee.

6.2 (Deleted)
6.3 (Deleted)

4

c. Mechanism for scheduling meetings

d. Meeting agenda

e. Use of subcommittee

f. Review and approval, by members, of OC actions

g. Distribution of minutes

6.3 Special Inspections and Audits

A. An independent fire protection and loss prevention inspection and audit shall be performed annually utilizing either qualified offsite Nuclear Management Company, LLC personnel or an outside fire protection consultant.

B. An inspection and audit by an outside qualified fire protection consultant shall be performed at intervals no greater than three years.

6.4 Action to be Taken if a Safety Limit is Exceeded

If a Safety Limit is exceeded, the reactor shall be shut down immediately. An immediate report shall be made to the Commission and to the corporate officer with direct responsibility for the plant or his designated alternate in his absence. A complete analysis of the circumstances leading up to and resulting from the situation, together with recommendations by the Operations Committee, shall also by prepared. This report shall be submitted to the Commission, to the corporate officer with direct responsibility for the plant and the Chairman of the Safety Audit Committee within 14 days of the occurrence.

Reactor operation shall not be resumed until authorized by the U.S. Nuclear Regulatory Commission.

6.5 Plant Operating Procedures

Detailed written procedures, including the applicable check-off lists and instructions, covering areas listed below shall be prepared and followed. These procedures and changes thereto, except as specified in 6.5.G shall be reviewed by the Operations Committee and approved by a member of plant management designated by the Plant Manager.

A. Plant Operations

1. Integrated and system procedures for normal startup, operation and shutdown of the reactor and all systems and components involving nuclear safety of the facility.

2. Fuel handling operations.

3. Actions to be taken to correct specific and foreseen potential or actual malfunction of systems or components including responses to alarms, primary system leaks and abnormal reactivity changes and including follow-up actions required after plant protective system actions have initiated.

4. Surveillance and testing requirements that could have an effect on nuclear safety.

5. Implementing procedures of the emergency plan, including procedures for coping with emergency conditions involving potential or actual releases of radioactivity.

6. Implementing procedures of the fire protection program.

7. Implementing procedures for the Process Control Program and Offsite Dose Calculation Manual including quality control measures.

Drills on the procedures specified in A.3 above shall be conducted as a part of the retraining program. Drills on the procedures specified in A.5 above shall be conducted at least semi-annually, including a check of communications with offsite support groups.

B. Radiological

1.a. A Radiation Protection Program, consistent with the requirements of 10 CFR 20, shall be developed and followed. The Radiation Protection Program shall consist of the following:

(1) A Radiation Protection Plan, which shall be a complete definition of radiation protection policy and program

(2) Procedures which implement the requirements of the Radiation Protection Plan

The Radiation Protection Plan and implementing procedures, with the exception of those non-safety related procedures governing work activities exclusively applicable to or performed by health physics personnel, shall be reviewed by the Operations Committee and approved by a member of plant management designated by the Plant Manager. Health physics procedures not reviewed by the Operations Committee shall be reviewed and approved by the ~~General Superintendent~~ Radiation ~~Services~~ Protection manager.

b. In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit.[1] Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

(1) A radiation monitoring device that continuously indicates the radiation dose rate in the area.

(2) A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rates in the area have been determined and personnel have been made knowledgeable of them.

(3) An individual qualified in radiation protection procedures with a radiation dose rate monitoring device. This individual is responsible for providing positive radiation protection control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the radiation protection procedures or the applicable Radiation Work Permit.

c. The above procedure shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition doors shall be locked or attended, to prevent unauthorized entry into these areas and the keys or key devices for locked doors shall be maintained under the administrative control of the Plant Manager.

1. Health Physics personnel or personnel escorted by Health Physics personnel shall be exempt from the Radiation Work Permit issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas. This footnote applies only to high radiation areas of 1000 mrem/hr or less.

E. Offsite Dose Calculation Manual (ODCM)

(5) be

The ODCM shall be approved by the Commission prior to initial implementation. Changes to the ODCM shall satisfy the following requirements:

1. Shall ~~be~~ submitted to the Commission with the Semi-Annual Radioactive Effluent release report for the period in which the change(s) were made effective. This submittal shall contain:

   a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information. Information submitted should consist of a package of those pages of the ODCM to be changed with each page numbered and provided with a revision date, together with appropriate analyses or evaluations justifying the change(s).

   b. a determination that the change will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and

   c. documentation of the fact that the change has been reviewed and found acceptable by the Operations Committee.

2. Shall become effective upon review and acceptance by the Operations Committee.

F. Security

Procedures shall be developed to implement the requirements of the Security Plan and the Security Contingency Plan. These implementing procedures, with the exception of those non-safety related procedures governing work activities exclusively applicable to or performed by security personnel, shall be reviewed by the Operations Committee and approved by a member of plant management designated by the Plant Manager. Security procedures not reviewed by the Operations Committee shall be reviewed and approved by the ~~Superintendent~~, Security.

(3) (3) manager

G. Temporary Changes to Procedures

Temporary changes to those procedures which are required to be reviewed by the Operations Committee described in A, B, C, D, E and F above, which do not change the intent of the original procedures may be made with the concurrence of two members of the unit management staff, at least one of whom holds a Senior Operator License. Such changes should be documented, reviewed by the Operations Committee and approved by a member of plant management designated by the Plant Manager within one month. Temporary changes to health physics and security procedures not reviewed by the Operations Committee shall be reviewed by the ~~General Superintendent,~~ Radiation ~~Services~~ for health physics procedures and the ~~Superintendent,~~ Security for security procedures.

(3) manager

(3) protection manager

(3)

2. Occupational Exposure Report.(1) An annual report of occupational exposure covering the previous calendar year shall be submitted prior to March 1 of each year.

   The report should tabulate on an annual basis the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man-rem exposure according to work and job functions, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures ~~totalling~~ less than 20% of the individual total dose need not to be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions.

   Totaling (5)

3. Monthly Operating Report. A monthly report of operating statistics and shutdown experience covering the previous month shall be submitted by the 15th of the following month.

4. Semiannual Radioactive Effluent Release Report. Routine radioactive effluent release reports covering the operation of the unit during the previous six months of operation shall be submitted within 60 days after January 1st and July 1st of each year.

   The radioactive effluent release reports shall include a summary of the quantities of radioactive liquid and gaseous effluents as outlined in Appendix B of Regulatory Guide 1.21, Revision 1, June, 1974, with data summarized on a quarterly basis.

   The report to be submitted 60 days after January 1st of each year shall include an assessment of the radiation doses from radioactive effluents released from the plant during the previous calendar year. This same report shall also include an assessment of the radiation doses from radioactive liquid and gaseous effluents to individuals due to their activities inside the site boundary (Figures 3.8.1 and 3.8.2) during the report period. All assumptions used in making these assessments (i.e., specific activity, exposure time and location) shall be included in these reports. The assessment of radiation doses shall be performed in accordance with the Offsite Dose Calculation Manual (ODCM) or standard NRC computer codes.

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1. This report supplements the requirements of 10 CFR 20, Section 20.407. If 10 CFR 20, Section 20.407 is revised to include such information, this Specification is unnecessary.

C. Environmental Reports

1. Annual Radiation Environmental Monitoring Report

a. Annual Radiation Environmental Monitoring Reports covering the operation of the program during the previous calendar year shall be submitted prior to May 1 of each year.

b. The Annual Radiation Environmental Monitoring Reports shall include summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparison with preoperational studies, operational controls (as appropriate), and previous environmental surveillance reports and an assessment of the observed impacts of the plant operation on the environment. The reports shall also include the results of land use census required by Specification 4.16.B.1. If harmful effects or evidence of irreversible damage are detected by the monitoring, the report shall provide an analysis of the problem and a planned course of action to alleviate the problem.

c. The Annual Radiation Environmental Monitoring Reports shall include summarized and tabulated results in the format of Regulatory Guide 4.8, December 1975 of all radiological environmental samples taken during the report period. In the event that some results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in the supplementary report.

d. The reports shall also include the following: a summary description of the radiological environmental monitoring program; a map of all sampling locations keyed to a table giving distances and directions from the ~~reactor~~ and the results of licensee participation in the Interlaboratory Comparison Program, required by Specification 4.16.C.1.

6.8 Programs

~~5.5.11~~ A

Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

1. ~~a.~~ Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.

2. ~~b.~~ ~~Licensees may make~~ changes to Bases may be made without prior NRC approval provided the changes do not involve either of the following:

   a. ~~1.~~ a change in the TS incorporated in the license; or

   b. ~~2.~~ a change to the ~~updated FSAR~~ USAR or Bases that ~~involves an unreviewed safety question as defined in~~ requires a 10 CFR 50.59. license amendment pursuant to

3. ~~c.~~ The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the ~~FSAR.~~ USAR.

4. ~~d.~~ Proposed changes that ~~meet the criteria~~ involve changes as described in a. or b. of Specification ~~5.5.11b~~ 6.8.A.2 above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

(5) → 6.8.A.2

To the Bases

Exhibit C

MONTICELLO NUCLEAR GENERATING PLANT

Supplement to Revision to Technical Specification Administrative Controls and Other Miscellaneous Changes

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4.0 SURVEILLANCE REQUIREMENTS

A. The surveillance requirements of this section shall be met. Each surveillance requirement shall be performed at the specified times except as allowed in B and C below.

B. Specific time intervals between tests may be extended up to 25% of the surveillance interval to accommodate normal test schedules with the exception that, the intervals between tests scheduled for refueling shutdowns shall not exceed two years.

C. Whenever the plant condition is such that a system or component is not required to be operable the surveillance testing associated with that system or component may be discontinued. Discontinued surveillance tests shall be resumed less than one test interval before establishing plant conditions requiring operability of the associated system or component.

D. If it is discovered that a surveillance was not performed within the extended time interval allowed by 4.0.B, then the affected equipment shall be declared inoperable.

E. Compliance with 4.0.D may be delayed, from the time of discovery, up to 24 hours or up to the limit of the time interval, whichever is less. This delay period is permitted to allow performance of the surveillance.

6.0 ADMINISTRATIVE CONTROLS

6.1 Organization

A. The plant manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for the safe operation and maintenance of the plant. During periods when the plant manager is unavailable, this responsibility may be delegated to other qualified supervisory personnel.

The Shift Supervisor (or, a designated individual during periods of absence from the control room and shift supervisor's office) shall be responsible for the control room command function.

B. Offsite and Onsite Organizations

Onsite and offsite organizations shall be established for plant operation and corporate management, respectively. The onsite and offsite organizations shall include positions for activities affecting plant safety.

1. Lines of authority, responsibility and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, function descriptions of department responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements including the plant-specific titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications are documented in corporate and plant procedures, or the Updated Safety Analysis Report or the Operational Quality Assurance Plan.

2. A corporate officer with direct responsibility for the plant shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining and providing technical support to the plant to ensure nuclear safety. This position has the responsibility for the Fire Protection Program.

3. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

C. Plant Staff

1. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.1.1.
2. At least one licensed operator shall be in the control room when fuel is in the reactor.
3. At least two licensed operators shall be present in the control room during cold startup, scheduled reactor shutdown, and during recovery from reactor trips.
4. An individual qualified in radiation protection procedures shall be onsite when fuel is in the reactor.
5. All alterations of the reactor core shall be directly supervised by a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
6. A fire brigade of at least five members shall be maintained onsite at all times.* The fire brigade shall not include the three members of the shift organization required for safe shutdown of the reactor from outside the control room.
7. The operations manager shall be formerly licensed as a Senior Reactor Operator or hold a current Senior Reactor Operator License.
8. At least one member of plant management holding a current Senior Reactor Operator License shall be assigned to the plant operations group on a long term basis (approximately two years). This individual will not be assigned to a rotating shift.

D. Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the radiation protection manager or designated health physicist who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, (2) the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents, and (3) the operations manager who shall meet the requirement of ANSI N18.1-1971 except that NRC license requirements are as specified in Specification 6.1.C.7. The training program shall be under the direction of a designated member of Nuclear Management Company, LLC management.

* Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of Fire Brigade members provided immediate action is taken to restore the Fire Brigade to within the minimum requirements.

e. Shift Technical Advisor (STA) and Shift Emergency Coordinator (SEC) onsite rest time periods shall not be considered as hours worked when determining the total work time for which the above limitations apply.

2. Any deviation from the above guidelines shall be authorized by the plant manager or designee, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. During plant emergencies the Emergency Director shall have this authority. Controls shall be included in the procedures such that individual overtime shall be reviewed monthly to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not allowed.

TABLE 6.1.1
MINIMUM SHIFT CREW COMPOSITION (Note 1)

CATEGORY	APPLICABLE PLANT CONDITIONS	
	SHUTDOWN OR REFUELING MODE AND $<212°F$	STARTUP OR RUN MODE (Note 4) OR $\geq 212°F$
No. Licensed Senior Operators (LSO)	1 (Note 2)	2 (Note 3, 5)
Total No. Licensed Operators (LSO & LO)	2	4
Total No. Licensed and Unlicensed Operators	3	6

Notes:

1. Shift crew composition may be one less than the minimum requirements for a period of time not to exceed two hours in order to accommodate an unexpected absence of one duty shift crew member provided immediate action is taken to restore the shift crew composition to within the minimum requirements specified.

2. Does not include the licensed Senior Reactor Operator, or Senior Reactor Operator Limited to Fuel Handling, supervising alterations of the reactor core.

3. One LSO shall be in the control room or the shift supervisor's office at all times when the reactor is in the Startup or Run Mode or reactor coolant temperature is greater than or equal to 212°F. At least 50% of the time, an LSO shall actually be in the control room proper when the reactor is in the Startup or Run Mode or reactor coolant temperature is greater than or equal to 212°F.

4. Except for momentary switching to Startup Mode for testing.

5. One LSO position shall be filled by an individual who meets the qualifications of a Shift Technical Advisor as defined in Section 6.1.D(2). If a qualified individual to staff the combined LSO/STA position is not available, a dedicated Shift Technical Advisor shall be on duty, in addition to two licensed senior operators.

6.2 (Deleted)

6.3 (Deleted)

6.4 Action to be Taken if a Safety Limit is Exceeded

If a Safety Limit is exceeded, the reactor shall be shut down immediately. An immediate report shall be made to the Commission and to the corporate officer with direct responsibility for the plant or his designated alternate in his absence. A complete analysis of the circumstances leading up to and resulting from the situation, together with recommendations by the Operations Committee, shall also by prepared. This report shall be submitted to the Commission, to the corporate officer with direct responsibility for the plant and the Chairman of the Safety Audit Committee within 14 days of the occurrence.

Reactor operation shall not be resumed until authorized by the U.S. Nuclear Regulatory Commission.

6.5 Plant Operating Procedures

Detailed written procedures, including the applicable check-off lists and instructions, covering areas listed below shall be prepared and followed. These procedures and changes thereto, except as specified in 6.5.G shall be reviewed by the Operations Committee and approved by a member of plant management designated by the plant manager.

A. Plant Operations

1. Integrated and system procedures for normal startup, operation and shutdown of the reactor and all systems and components involving nuclear safety of the facility.

2. Fuel handling operations.

3. Actions to be taken to correct specific and foreseen potential or actual malfunction of systems or components including responses to alarms, primary system leaks and abnormal reactivity changes and including follow-up actions required after plant protective system actions have initiated.

4. Surveillance and testing requirements that could have an effect on nuclear safety.

5. Implementing procedures of the emergency plan, including procedures for coping with emergency conditions involving potential or actual releases of radioactivity.

6. Implementing procedures of the fire protection program.

7. Implementing procedures for the Process Control Program and Offsite Dose Calculation Manual including quality control measures.

Drills on the procedures specified in A.3 above shall be conducted as a part of the retraining program. Drills on the procedures specified in A.5 above shall be conducted at least semi-annually, including a check of communications with offsite support groups.

B. Radiological

1.a. A Radiation Protection Program, consistent with the requirements of 10 CFR 20, shall be developed and followed. The Radiation Protection Program shall consist of the following:

(1) A Radiation Protection Plan, which shall be a complete definition of radiation protection policy and program

(2) Procedures which implement the requirements of the Radiation Protection Plan

The Radiation Protection Plan and implementing procedures, with the exception of those non-safety related procedures governing work activities exclusively applicable to or performed by health physics personnel, shall be reviewed by the Operations Committee and approved by a member of plant management designated by the plant manager. Health physics procedures not reviewed by the Operations Committee shall be reviewed and approved by the radiation protection manager.

b. In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit.[1] Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

(1) A radiation monitoring device that continuously indicates the radiation dose rate in the area.

(2) A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rates in the area have been determined and personnel have been made knowledgeable of them.

(3) An individual qualified in radiation protection procedures with a radiation dose rate monitoring device. This individual is responsible for providing positive radiation protection control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the radiation protection procedures or the applicable Radiation Work Permit.

c. The above procedure shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition doors shall be locked or attended, to prevent unauthorized entry into these areas and the keys or key devices for locked doors shall be maintained under the administrative control of the plant manager.

1. Health Physics personnel or personnel escorted by Health Physics personnel shall be exempt from the Radiation Work Permit issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas. This footnote applies only to high radiation areas of 1000 mrem/hr or less.

E. Offsite Dose Calculation Manual (ODCM)

The ODCM shall be approved by the Commission prior to initial implementation. Changes to the ODCM shall satisfy the following requirements:

1. Shall be submitted to the Commission with the Semi-Annual Radioactive Effluent release report for the period in which the change(s) were made effective. This submittal shall contain:

   a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information. Information submitted should consist of a package of those pages of the ODCM to be changed with each page numbered and provided with a revision date, together with appropriate analyses or evaluations justifying the change(s).

   b. a determination that the change will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and

   c. documentation of the fact that the change has been reviewed and found acceptable by the Operations Committee.

2. Shall become effective upon review and acceptance by the Operations Committee.

F. Security

Procedures shall be developed to implement the requirements of the Security Plan and the Security Contingency Plan. These implementing procedures, with the exception of those non-safety related procedures governing work activities exclusively applicable to or performed by security personnel, shall be reviewed by the Operations Committee and approved by a member of plant management designated by the plant manager. Security procedures not reviewed by the Operations Committee shall be reviewed and approved by the security manager.

G. Temporary Changes to Procedures

Temporary changes to those procedures which are required to be reviewed by the Operations Committee described in A, B, C, D, E and F above, which do not change the intent of the original procedures may be made with the concurrence of two members of the unit management staff, at least one of whom holds a Senior Operator License. Such changes should be documented, reviewed by the Operations Committee and approved by a member of plant management designated by the plant manager within one month. Temporary changes to health physics and security procedures not reviewed by the Operations Committee shall be reviewed by the radiation protection manager for health physics procedures and the security manager for security procedures.

2. Occupational Exposure Report.(1) An annual report of occupational exposure covering the previous calendar year shall be submitted prior to March 1 of each year.

   The report should tabulate on an annual basis the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man-rem exposure according to work and job functions, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totaling less than 20% of the individual total dose need not to be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions.

3. Monthly Operating Report. A monthly report of operating statistics and shutdown experience covering the previous month shall be submitted by the 15th of the following month.

4. Semiannual Radioactive Effluent Release Report. Routine radioactive effluent release reports covering the operation of the unit during the previous six months of operation shall be submitted within 60 days after January 1st and July 1st of each year.

   The radioactive effluent release reports shall include a summary of the quantities of radioactive liquid and gaseous effluents as outlined in Appendix B of Regulatory Guide 1.21, Revision 1, June, 1974, with data summarized on a quarterly basis.

   The report to be submitted 60 days after January 1st of each year shall include an assessment of the radiation doses from radioactive effluents released from the plant during the previous calendar year. This same report shall also include an assessment of the radiation doses from radioactive liquid and gaseous effluents to individuals due to their activities inside the site boundary (Figures 3.8.1 and 3.8.2) during the report period. All assumptions used in making these assessments (i.e., specific activity, exposure time and location) shall be included in these reports. The assessment of radiation doses shall be performed in accordance with the Offsite Dose Calculation Manual (ODCM) or standard NRC computer codes.

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1. This report supplements the requirements of 10 CFR 20, Section 20.407. If 10 CFR 20, Section 20.407 is revised to include such information, this Specification is unnecessary.

C. Environmental Reports

1. Annual Radiation Environmental Monitoring Report

a. Annual Radiation Environmental Monitoring Reports covering the operation of the program during the previous calendar year shall be submitted prior to May 1 of each year.

b. The Annual Radiation Environmental Monitoring Reports shall include summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparison with preoperational studies, operational controls (as appropriate), and previous environmental surveillance reports and an assessment of the observed impacts of the plant operation on the environment. The reports shall also include the results of land use census required by Specification 4.16.B.1. If harmful effects or evidence of irreversible damage are detected by the monitoring, the report shall provide an analysis of the problem and a planned course of action to alleviate the problem.

c. The Annual Radiation Environmental Monitoring Reports shall include summarized and tabulated results in the format of Regulatory Guide 4.8, December 1975 of all radiological environmental samples taken during the report period. In the event that some results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in the supplementary report.

d. The reports shall also include the following: a summary description of the radiological environmental monitoring program; a map of all sampling locations keyed to a table giving distances and directions from the plant site; and the results of licensee participation in the Interlaboratory Comparison Program, required by Specification 4.16.C.1.

6.8 PROGRAMS

A. Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

1. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.

2. Changes to Bases may be made without prior NRC approval provided the changes do not involve either of the following:

   a. a change in the TS incorporated in the license; or

   b. a change to the USAR or Bases that requires a license amendment pursuant to 10 CFR 50.59.

3. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the USAR.

4. Proposed changes to the Bases that involve changes as described in a. or b. of Specification 6.8.A.2 above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).