

Reactor Facilities, 016

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

MAR 1 9 1976

Northern States Power Company
ATTN: Mr. Leo Wachter
Vice President
Power Production and
System Operation
414 Nicollet Mall
Minneapolis, Minnesota 55401

Docket No. 50-263

Gentlemen:

This refers to the inspection conducted by Messrs. C. Brown and H. Kister of this office on February 10-13, 1976, and by Messrs. C. Brown and N. Choules on February 17-20, 1976, of activities at the Monticello Nuclear Generating Plant authorized by NRC Operating License No. DPR-22 and to the discussion of our findings with Mr. Larson and other members of the plant staff at the conclusion of the inspection.

The enclosed copy of our inspection report identifies areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations, and interviews with personnel.

During this inspection, certain of your activities appeared to be in noncompliance with NRC requirements, as described under Enforcement Items in the Summary of Findings section of the enclosed inspection report.

This notice is sent to you pursuant to the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Section 2.201 requires you to submit to this office within twenty days of your receipt of this notice a written statement or explanation in reply, including for each item of noncompliance: (1) corrective action taken and the results achieved; (2) corrective action to be taken to avoid further noncompliance; and (3) the date when full compliance will be achieved.

Northern States Power
Company

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MAR 19 1976

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room, except as follows. If this report contains information that you or your contractors believe to be proprietary, you must apply in writing to this office, within twenty days of your receipt of this letter, to withhold such information from public disclosure. The application must include a full statement of the reasons for which the information is considered proprietary, and should be prepared so that proprietary information identified in the application is contained in an enclosure to the application.

We will gladly discuss any questions you have concerning this inspection.

Sincerely yours,

Gaston Fiorelli, Chief
Reactor Operations and
Nuclear Support Branch

Enclosure:
IE Inspection Report
No. 050-263/76-03

cc w/encl:
C. E. Larson, Plant
Manager

bcc w/encl:
PDR
Local PDR
NSIC
TIC
Anthony Roisman,
Esq., Attorney
HQ Reproduction

UNITED STATES NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report of Operations Inspection

IE Inspection Report No. 050-263/76-03

Licensee: Northern States Power Company
414 Nicollet Mall
Minneapolis, Minnesota 55401

Monticello Nuclear Generating Plant License No. DPR-22
Monticello, Minnesota Category: C

Type of Licensee: BWR GE 1670 MWt

Type of Inspection: Routine, Unannounced

Dates of Inspection: February 10-13 and 17-20, 1976

Principal Inspector:

G. Ziorelli for
N. C. Choules

3/19/76
(Date)

Accompanying Inspectors: H. B. Kister

H. B. Kister

2-18-76
(Date)

C. H. Brown
C. H. Brown

3/18/76
(Date)

Other Accompanying Personnel: None

Reviewed By:

E. L. Jordan for
E. L. Jordan, Chief
Reactor Projects Section 2

3/19/76
(Date)

SUMMARY OF FINDINGS

Inspection Summary

Inspection on February 10-13 and 17-20, (76-03): Design changes, procurement, procedures, calibrations, surveillance testing, limiting safety setting, limiting conditions for operations, maintenance, and reportable occurrences were reviewed. One item of noncompliance related to following administrative procedures was identified.

Enforcement Action

Deficiency

Contrary to 10 CFR Part 50, Appendix B, Criterion V, plant administrative procedures relating to quality were not adhered to in the following instances.

- A. Systems on which maintenance was performed were not identified as critical systems and second level review was not performed as required by 4 ACD 3.6, Paragraph 6.1.3.2, for Work Request Authorizations (WRAs) R1-110, R1-111, R1-146, and R2-147. (Report Details, Paragraph 3)
- B. For WRA 75-1530, the block identified on the WRA form as "Testing Completed and Satisfactory Results" was not signed off as required by 4 ACD 3.6, Paragraph 6.2.19. (Report Details, Paragraph 3)
- C. A change to Purchase Order No. 67830 was not properly documented in accordance with Paragraph 6.13 of ACD 8.1. (Report Details, Paragraph 6)
- D. Quality Assurance requirements were not included on Purchase Order No. M65357 in accordance with ACD.8.2, Paragraph 6.2. (Report Details, Paragraph 6)

Licensee Action on Previously Identified Enforcement Items

Corrective action has not been completed on establishing a system for Operations Committee review and plant management approval of corrective maintenance procedures.^{1/}

1/ IE Inspection Rpt No. 050-263/75-18.

Other Significant Items

A. System and Components

None.

B. Facility Items

The plant was shutdown on February 20, 1976, to perform plant maintenance and prepare for torus testing to obtain data on the effects of hydrodynamic forces. As of March 1, 1976, this test has been indefinitely postponed due to possible design deficiencies with the torus.

C. Managerial Items

None.

D. Noncompliance Identified and Corrected by Licensee

None.

E. Deviations

None.

F. Status of Previously Reported Unresolved Items

Not applicable.

Management Interview

A management interview was conducted with Messrs. Clarity, Anderson, Antony, Shamla, and Scheinost at the conclusion of the inspection on February 20, 1976.

A. Design Changes

The inspector stated that he had reviewed several design changes and that no items of noncompliance were identified. The inspector stated that in the review of work requests for two design changes he noted that the torus and reactor cleanup systems were not identified as critical systems and review of the licensee's administrative procedures did not identify them as critical systems. The inspector stated it was his opinion that these systems meet the requirements for critical systems and requested the licensee to review his critical systems list. The licensee stated they would review the critical systems list for completeness. (Report Details, Paragraph 2)

B. Maintenance

The inspector stated that he had reviewed several Work Request Authorizations (WRAs) and identified an item of noncompliance in that four authorizations involving critical systems, were not identified as such and signed off as being reviewed, and one WRA requiring testing was not signed off as completed, as required by the licensee's Administrative Control Directive ACD 3.6. The licensee acknowledged the inspector's statement.

The inspector stated that in general the WRAs need more instructions regarding detailed work steps, referencing technical manuals and drawings. The inspector stated that in discussions with the licensee's representatives, it was indicated that technical manuals and drawings are used in the execution of WRAs, but they are not always referenced on WRA. The inspector stated that the WRA should be as complete as possible to assure that a job is properly accomplished. The licensee stated they were taking steps to improve the content of their WRAs. (Report Details, Paragraph 3)

C. Reportable Occurrences

1. AO 75-23

The inspector stated he had reviewed this occurrence and the licensee's corrective action was complete with the exception that the appropriate Operation Control Document (OCD) had not been revised to provide procedures for governor installation and to require an AUTO start of diesel generator whenever maintenance is performed on the governor system. The licensee stated the OCD would be revised to require an AUTO start whenever maintenance is performed on the governors and to provide procedures for governor installation. (Report Details, Paragraph 4)

2. AO 75-26

The inspector stated that from conversation with licensee personnel, it was indicated that a preventative maintenance program would be initiated for the valve that was sticking. The licensee confirmed that a preventative maintenance program would be initiated. (Report Details, Paragraph 4)

D. Outstanding and Miscellaneous Items

Subject items, including revision of surveillance test 120, lost parts in reactor vessel, containment valves, dead weight tester calibration, turbine piping thinning and motor operated valve overload indication were discussed. (Report Details, Paragraph 5)

E. Surveillance Procedures

The inspector stated that changes to surveillance procedures that involve number designations should not be considered as typos. The licensee stated that a revision to the controlling procedure would be made so that apparent errors in number designations in the surveillance procedures would be treated as temporary changes. (Report Details, Paragraph 9.d)

F. SBLC Surveillance

The inspector stated that the accuracy had not been determined for the method used to verify the boron concentration of the Standby Liquid Control Tank and that the full intent of the applicable Technical Specifications was a quantitative analysis to be performed periodically. The licensee stated that a review would be performed in this area in a timely manner. (Report Details, Paragraph 9.d)

G. Chemicals

The inspector stated that he understood a monitoring program was being set up to maintain the inventory of chemicals and to assure that chemicals were within their shelf life. The licensee affirmed the statement and stated that a program would be initiated in a timely manner.

Management Interview

A management interview was conducted with Messrs. Larson, Clarity, Anderson, Pochop, Scheinost, Sparrow, and Antony on February 13, 1976.

A. Procurement Program

The inspector stated that he had reviewed the licensee's Administrative Controls relating to material procurement. The inspector summarized the areas reviewed and his findings. An item of noncompliance was noted regarding purchase order preparation and changes. (Report Details, Paragraph 6)

B. Procedures

The inspector stated that he had reviewed the licensee's Administrative system for the control of Plant Procedures. The inspector summarized the areas reviewed and his findings. The inspector's questions with regard to temporary procedure

changes were resolved and the inspector's concern with regard to the need for Operations Committee review of the procedure for removal of Reactor Well Shield Blocks (9203) resulted in the licensee agreeing to review their position of not requiring Operations Committee review of this procedure. No items of noncompliance were identified. (Report Details, Paragraph 7)

C. Surveillance Procedures

The inspector stated that he had noted that two surveillance procedures with corrections initialed by two SROs did not have the master copy corrected. The licensee stated that in these two cases the errors were considered to be typos and not temporary changes to procedures. The inspector stated that this item would be reviewed further. (Report Details, Paragraph 9.d and February 20, 1976, Management Interview Item E)

REPORT DETAILS

1. Persons Contacted

C. E. Larson, Plant Manager
M. H. Clarity, Superintendent, Plant Engineering and
Radiation Protection
W. E. Anderson, Superintendent, Operation and Maintenance
D. D. Antony, Plant Engineer Operations
W. H. Shama, Plant Engineer Technical
H. E. Nimo, Maintenance Supervisor
W. J. Hill, Engineer Instruments
W. H. Sparrow, Operations Supervisor
S. L. Pearson, Shift Supervisor
R. A. Kmitch, Shift Supervisor
L. R. Eliason, Radiation Protection Engineer
R. D. Jacobson, Chemist
P. A. Pochop, Quality Engineer
R. L. Scheinost, Quality Engineer
D. Nevinski, Nuclear Engineer
R. A. Goranson, Engineer
J. McVey, Engineer
M. F. Hammer, Engineer
B. D. Day, Engineer
R. E. Perry, Engineer
T. Grue, Engineer
D. H. Alcott, Instrument and Control Specialist
E. M. Reilly, Instrument and Control Specialist
H. Kendall, Office Supervisor

2. Design Changes and Modifications

The following power production department ACDs describe the control of design changes and modifications to safety related equipment.

3 ACD 4.1, Design Change Control
3 ACD 4.2, Design Change Installation Procedure
3 ACD 4.3, Design Change Implementation
3 ACD 4.4, Design Change Preoperational Testing
4 ACD 3.6, Work Request Authorizations (Plant ACD)

These ACDs were reviewed and they appear to be adequate to assure that the control of design changes and modifications will be in conformance with regulatory requirements.

The following completed safety related design change packages which were completed during 1975 were reviewed:

- M74-45, Drywell to torus breaker test solenoid valves inside the torus.
- M75-10, Modification of inner filter assembly on two control rod drives.
- M75-49, Removal of the reactor vessel bottom head drain line.
- M75-59, Replacement of instrument root valves on main steam lines.
- M75-64, Backwash receiving tank vent to the steam packing exhauster delay line.
- M75-76, Modified torus hatch cover.
- SRI 149, Addition of pressure averaging manifold on main steam lines.

No items of noncompliance were noted in the review of these design changes. In the review of WRAs for M75-49 and M75-76 the inspector noted that the torus and reactor cleanup systems connected to the pressure vessel were not identified as "critical" systems. Critical systems are defined in 4 ACD 3.6 as systems or equipment which are required to be operable by the Technical Specifications or are critical to continued operation of the plant. 4 ACD 3.6 requires a second level review of proposed work for critical systems and requires signoffs on the WRA. A list of critical systems is given in the licensee's procedure 4 AWI 3.6.1. The torus and the cleanup system were not identified as critical systems in 4 AWI 3.6.1. It is the inspector's opinion that these systems meet the requirements of a critical system as defined by the licensee.

3. Maintenance

The following ACD describes the control of maintenance to safety related equipment:

4 ACD 3.6, Work Request Authorization. This ACD was reviewed and it appears to be adequate to assure that control of maintenance activities will be in accordance with regulatory requirements.

The following selected safety related Work Request Authorizations (WRAs), which were completed during 1975, were reviewed:

WRAs Numbered 74-1955, 75-123, 75-137, 75-204, 75-225, 75-809, 75-1257, 75-1530, R1-110, R1-111, R1-146, R2-8, R2-97, R2-177, R2-245, R2-283 and R2-292.

In review of these WRAs, two instances of noncompliance where the licensee failed to follow his procedures were identified as follows:

The licensee's procedure 4 ACD 3.6, Paragraph 6.1.3.2, requires that when maintenance is performed on critical systems identified in 4 AWI 3.6.1, that the critical systems block on the WRA form be checked and the WRA reviewed and approved by the Plant Engineer Technical or Operations, and the Operations Supervisor. Review of WRAs R1-110, R1-111, R1-146, R2-174 showed the maintenance was not identified as work on critical systems. The WRAs involved maintenance on critical systems identified in 4 AWI 3.6.1.

4 ACD 3.6, Paragraph 6.2.19, requires that when testing is required that the appropriate block on the WRA shall be signed by the responsible persons when the testing requirements are satisfactory. Review of WRA 75-1530 showed that testing was required but it was not signed off as being completed and satisfactory. The next block "All Followup Requirements Complete" was signed off by the Shift Supervisor.

In review of the WRAs by the inspector, it was stated that in general they contained only a minimum of instructions and referencing of drawings and technical manuals. The licensee representative indicated that in many cases additional instructions and drawings are attached to the WRAs when the WRAs are sent to the field for execution. Examples of this were shown to the inspector for some WRAs which were being prepared for field execution.

3. Reportable Occurrences

a. AO 75-23

The licensee informed the inspector by telephone on November 17, 1976, that the No. 12 Emergency Diesel Generator tripped on overspeed during an automatic start. The details and corrective action for this occurrence are given in the licensee's report.^{2/}

Review of this occurrence with the licensee's representative showed that the diesel generator had been started manually following replacement of the governor on October 16, 1976, but failed to start on November 16, 1976, from an automatic start signal. When the diesel receives an automatic start signal, overspeed trip protection circuitry is actuated which is not actuated during a manual start. Maladjustment of the governor caused the unit to trip prior to obtaining normal operating speed.

In the licensee's investigation report of this occurrence, two recommendations are made which the licensee intends to implement:

- (1) A procedure will be developed for proper installation of the governor on the Emergency Diesel Generators.
- (2) The procedure will require testing in the automatic start capability following installation of a new governor.

The licensee's representative indicated they plan to require automatic start capability testing whenever maintenance which could effect the automatic start capability is performed.

b. AO 75-26

The licensee informed the inspector at the plant site on November 19, 1975, that the RCIC failed to start due to a sticking steam control valve. The details and corrective action for this occurrence are given in the licensee's report.^{3/}

^{2/} AO Rpt. No. 050-263/75-23, NSP to DL, dtd 11/26/75.

^{3/} AO Rpt. No. 050-263/75-14, NSP to DL, dtd 11/16/75.

The apparent cause of the sticking valve was a buildup of corrosion products and crud on the valve stem and pivots. In reviewing the occurrence with the licensee's representative it was indicated that the licensee plans to perform periodic preventative maintenance on the valve consisting of polishing and lubricating the stem and pivots.

4. Outstanding and Miscellaneous Items

The following items were reviewed:

a. Surveillance Test 0120, Reactor Vessel, and Head Flange Temperature Limitation

The inspector verified that the licensee had revised the subject test to specify general locations on the head and vessel where temperature measurements are to be made.^{4/}

b. Lost Parts in the Reactor Vessel

The inspector reviewed the licensee actions in regard to a lost gauge block previously reported.^{5/} The licensee had made an analysis which indicated the flow blockage resulting from the gauge block covering part of the fuel bundle orifice would not cause thermal problems. At the time of the inspection, a descriptive report describing the analysis had not been made and the analysis could only be understood with verbal guidance from the licensee's representative. The licensee stated a descriptive report would be prepared.

c. Containment Isolation Valves

The inspector inquired as to the licensee's action regarding valves with a history of excessive leakage.^{6/} The licensee stated the following action had been taken so far.

- (1) Main Steam Drain Line Valve (MO 2373) - This valve has been replaced with a new same type valve.
- (2) HPCI-9 Valve - The licensee intends to install a motor operated gate valve in addition to the currently installed check valve.

^{4/} IE Inspection Rpt. No. 050-236/75-05.

^{5/} IE Inspection Rpt. No. 050-236/75-18.

^{6/} IE Inspection Rpt. No. 050-263/75-17.

- (3) CRD Return Line Valve (CRD-31) - The licensee has attempted to procure a new check valve, but has been unsuccessful so far.
- (4) XP-6 Valve (Standby Liquid Control) - The licensee has attempted to procure a new check valve, but has been unsuccessful so far.
- (5) Core Spray Injection Check Valves (14-13A and 14-13B) - The licensee indicated they were submitting a technical specification change to delete testing these valves since there are two other isolation valves in each of the core spray lines.

d. Dead Weight Tester Calibration

On a previous inspection it was determined that the licensee dead weight tester was last calibrated in 1969.^{7/} At that time the licensee had not set a calibration frequency for the dead weight tester weights. The licensee indicated during this inspection that it was planned to calibrate the tester this year and they were working with the Prairie Island plant to establish a calibration frequency.

e. Turbine Piping Thinning

In a previous inspection it was reported that the erosion rate of the turbine moisture separator No. 3 inlet steam piping had increased.^{8/} As a result of this, burst testing of the pipe with thinning was planned.^{9/} During the fall refueling outage, measurements taken indicated that the previous measurements obtained in January 1975 were apparently in error and the erosion rate was normal. A section of pipe was removed and verified the latest measurements. Burst testing of the removed pipe section was not performed since the thinning was not nearly as much as it was previously thought to be.

f. Motor Operated Valve Overload Indication

In a previous inspection the licensee indicated that a design change was being processed which would modify the indication circuitry such that if the thermal overload is

- 7/ IE Inspection Rpt. No. 050-263/74-10.
- 8/ IE Inspection Rpt. No. 050-263/75-05.
- 9/ IE Inspection Rpt. No. 050-263/75-12.

actuated, the valve indicating lights in the control room would go out, indicating a problem to the operator. The licensee stated during this inspection that safety related motor operated valves indicating circuitry had been modified per the design change during the fall outage.

6. Procurement

The inspector reviewed the plant material procurement program. The review included a tour of the material storage areas, review of purchase requests, purchase orders, development of quality assurance requirements, receipt inspection and material issue. Comments are as follows:

- a. A review of eight purchase requests and purchase orders identified two instances of noncompliance with regard to preparation and processing of purchase orders.
 - (1) It was noted that the purchase request for Teledyne Snubbers (PO 67830) was designated as safety related material by the requestor. As required by ACD 8.2, a statement regarding quality assurance requirements was included on the purchase order. Upon review of the shipping invoice, it was noted that no certification or certificate of compliance was provided with the material. It was further noted that the requirements for material certification apparently were deleted. This was indicated by a note in the package signed by the Office Supervisor stating that no quality assurance certification was required. Paragraph 6.13 of ACD 8.1 states that any changes to the requirements of the purchase requisition without approval from the Office Supervisor and the Quality Engineer where Q-listed items are involved shall be cause for rejection. No approval by the Quality Engineer was evident. The licensee stated that the material had been accepted. Also, Paragraph 6.13 states that all revisions shall be processed in the same manner as the original requisition. No review of the revision to the requisition was listed by the requestor or the Plant Manager.
 - (2) It was noted that the purchase request for vacuum breaker valve "O" rings (PO M69357) was designated safety related by the requestor; however, no request for certificate of compliance was included on the purchase order as required by ACD 8.1. nor was all specific information required by ACD 8.2 for age con-

trol items specified (e.g., storage requirements). The inspector reviewed the receipt inspection form and noted that the QA Engineer had accepted the material based on the catalog number on the package which agreed with the material specified under that number in the catalog, and the fact that the cure data was provided on the package.

- b. The inspector observed that several originally supplied G.E. spare parts did not have certifications other than drawing and part number identification. The licensee stated that the spares under this category were original equipment supplied spares and no individual part certification was provided nor was it required at the time the equipment was provided. However, the licensee further stated that spare parts currently being provided by G.E. do include the required certification.

7. Procedures

The inspector reviewed selected areas of the licensee's program for controlling procedures. Areas included were review and approval of initial procedures, permanent and temporary changes, updating of controlled copies, technical content of revisions and revisions required as a result of changes to technical specifications. Type of procedures reviewed included; Operating Instructions, Abnormal Procedures, Emergency Procedures, Maintenance and Administrative Procedures. Comments are as follows:

- a. The inspector reviewed the licensee's system for handling temporary changes to procedures and noted that records of these changes consist of the actual handwritten change made in the procedure used including the required concurrences and the Operations Committee minutes which documents their review of the change. The completed procedure (with the handwritten change) is filed and maintained for 6 years as the record of the change made. If the change is to be made permanent it is done so in the next revision of the procedure.

The inspector reviewed four procedures that had temporary changes and verified that they had received the proper concurrence, had been reviewed within the required 30 days by the Operations Committee, and that the intent

of the procedure had not been changed. The inspector questioned the change made to procedure 9008B, Out of Core Wet Sipping, in that the requirement of the presence of the Fuel Handling Supervisor was deleted during the sipping operation. The licensee stated that the Fuel Handling Supervisor is required to be present during the refueling operation and handling of irradiated fuel and it had not been their intent that he need be present during the sipping operation. The inspector noted that the Operations Committee had reviewed the change and had concurred with it. This position was further reinforced at the management interview.

- b. The inspector noted that Procedure 9203, Reactor Cavity Shield Block Removal, had been excluded from review by the Operations Committee. When questioned, the licensee indicated that the procedure had not been considered as safety related. The inspector further noted that the procedure allowed removal of the shield blocks at a reduced power level if it had been determined that radiation levels were at a low enough level to permit work. The inspector questioned the rationale for not requiring Operations Committee review. During discussion at the management interview, the licensee agreed to review their position regarding this item.

8. Calibration of Equipment

a. Primary Calibration Standards

The inspector reviewed calibration records for the following primary calibration standards:

(1) Merriam Manometer

The manometer scale was certified in December, 1972 and the mercury appeared clean.

(2) Manfield and Green Dead Weight Tester

The accuracy of the weights were verified in August, 1969 and a program is under study for routine verification.

(3) Hewlett Parkard DC Voltage Standard

The voltage standard is being calibrated at the prescribed frequency.

The accuracies of these calibrations were traceable to the National Bureau of Standards. The storage of the equipment appears satisfactory. The date of certification of calibration for the DC voltage standard is the date stated on the certificate as the shipping date.

b. I&C Specialist Qualifications

The inspector reviewed qualifications records of two I&C specialists and verified they were in accordance with ANSI Standard 18.1.

c. Secondary Standards

The inspector reviewed the calibration records for Heise and Wallace and Tierney gauges; and Fairchild and Digitec voltmeters used for component calibration in 1975. The records indicated these instruments had been calibrated per the licensee's requirements. The licensee has placed the pressure gauges on a two month calibration frequency to verify that the instrument accuracy is maintained over this period to allow ample time for verification of Manfield and Green tester's weights. To date no unacceptable drift has been noted.

d. Component Instrumentation

The inspector reviewed 1975 calibration records for the following component instrumentation and determined that the instruments were being calibrated using procedures as required by the licensee:

<u>Procedure Number</u>	<u>Procedure Title and/or Instruments</u>
0018	IRM Scram Instrument Calibration
0043	Rod Block Upscale/Downscale Calibration
0020	High Drywell Pressure Scram Calibration PS 5-12 A through D
0031	ECCS Drywell High Pressure Calibration PS 10-101 A through D, and PS 10-100 A through D

- 0023 Turbine CV Fast Closure Scram Calibration
PS-7110 through PS-7113
- 0052 Main Steam Line Isolation High Flow Calibration.
DP152-116 A through D, DP152-117 A through
D, DP152-118 A through D, DP152-119 A
through D.
- 0036 ECCS UV Emergency Bus (Part I) Relays 127-5,
127-5X, 127-6, 127-6X, 162-3 and 162-4
- 0036 and 0039 ECCS UV Emergency Bus and ECCS Loss of
Auxiliary Power PS 2-3-52 A and B, and
LIS 2-3-72 A through D

9. Surveillance

a. The inspector selected a sampling of technical specification surveillance testing requirements and verified that the licensee has surveillance test procedure which accomplished the required surveillance testing. The review of the following surveillance test procedures revealed that prerequisites and preparation for the tests are specified, acceptance criteria are specified and operational checks prior to returning equipment to service are specified when required.

b. Surveillance Tests

The following surveillance tests performed in 1975 were reviewed:

<u>Procedure Number</u>	<u>Title</u>
0003	High Drywell Pressure Scram
0008	MSIV Closure Scram
0011	Turbine CV Fast Closure Scram
0013	IRM Scram
0030	ECCS Drywell High Pressure Test
*0036	ECCS UV Emergency Bus
*0039	ECCS Loss of Auxiliary Power
*0050	Main Steam Line Isolation High Temperature
0051	Main Steam Line Isolation High Flow Test
0074	Control Rod Exercise
0085	SBLC Pump Flow Rate Check

*Tests include calibration of instrumentation, verified as per Report Details, Paragraph 8.

<u>Procedure Number</u>	<u>Title</u>
0086	SBLC Manually Initiated Check Explosive Valve
0088	SBLC Relief Valve Test
1053	SBLC Boron Recirculation Test
0089	SBLC Boron Concentration
0108	HPCI Pump Operability
-0141	Vacuum Breaker Operability Check
-0142	Vacuum Breaker Instrument Check
0159	MSIV Trip/Closure Time Check
0160	MSIV Exercised
0189	Standby Diesel Generator Simulate Auto Start
0192	Standby Diesel Generator Fuel Quality
0193	250 Volt Battery Weekly Check
0195	250 Volt Battery Quarterly Check
1034	250 Volt Battery Monthly Check
1072	250 Volt Battery Semiannual check
0197	250 Volt Battery Discharge Test

The inspector verified that applicable technical specification requirements were complied with.

-1041 and 0142 are reactor building to pressure suppression chamber vacuum breakers.

c. Daily Surveillance

The inspector's review of daily surveillance included the following tests and checks performed during December 1975 and January 1976:

<u>Procedure Number</u>	<u>Title</u>
0001	Peak Heat Flux Check
0005	Reactor Water Level Instrumentation
0029	Reactor Level Instrumentat Sensor Check
0044	Rod Block Upscale/Downscale Sensor Check
0049	Rod Block Upscale/Detector not in Startup Sensor Check
-	Computer Printout-Core Performance Calculations
0014	Main Steam Line Isolation/Scram High Radiation Check

<u>Procedure Number</u>	<u>Title</u>
0053	Main Steam Line Isolation High Flow Sensor Check
0072	Radiation Monitor Off-Gas Isolation Sensor Check
0126	Reactor Coolant Drywell Leak Check
0133	Reactor Jet Pump Operability
0082	CRD Accumulator Pressure/Level Status
0097	Core Spray Header D/P Instrument Check
0134	Suppression Chamber Water Level/Temperature
0090	SBLC Solution Volume Check
0091	SBLC Solution Temperature Check
0092	SBLC Room Temperature Check

The inspector verified that applicable Technical Specification requirements were complied with.

d. Test Procedure Findings

Two of the test procedures were noted to have had initialed changes made on them ((1) relay designation and (2) two terminal block numbers) without the master procedures having been revised. In a discussion the licensee stated that these items had been considered to be typo errors and the changes had not been followed as temporary procedure changes. The inspector stated that only misspellings should be considered as typos so that the present administrative controls would assure mistakes in number designations would be corrected on the master procedure. The licensee agreed and stated a revision would be initiated to that effect. The master procedures were up dated during the week of February 20, 1976. The present boron concentration verification test is performed via specific gravity but not quantitatively for boron. In a discussion on this item the licensee stated a review would be preformed and a periodic quantitative analysis would be performed.

10. Limiting Conditions for Operations

During the review of completed surveillance test procedures described in Paragraph 9, the inspector verified that the limiting conditions for operations, safety setting, and limiting safety system settings for the system associated with these surveillance tests were met as required by the technical specifications. The inspector verified, by observation, that the ECCS systems were lined up properly for operation.

Strip charts and operating logs for the periods during a shutdown, startup and normal operations were reviewed and operations were verified maintained within safety limits.