MISSISSIPPI POWER & LIGHT COMPANY
Helping Build Mississippi
P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

June 29, 1983

NUCLEAR PRODUCTION DEPARTMENT

U. S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

Attention: Mr. Harold R. Denton, Director

Dear Mr. Denton:

SUBJECT: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-13
File 0260/L-860.0
Transmittal of Proposed
Changes to Grand Gulf
Technical Specifications
AECM-83/0370

Consistent with NRC direction provided to Mississippi Power & Light (MP&L) in the "Confirmation of Action" letter, Mr. J. P. O'Reilly to Mr. D. C. Lutken, dated October 20, 1982 (MAEC-82/242), MP&L is providing for your review and approval proposed changes to the Grand Gulf Nuclear Station Technical Specifications. These changes result primarily from MP&L's review of the technical specifications and surveillance procedures and are intended, in general, to enhance clarity or provide consistency with the plant design and operation. These changes have been reviewed and accepted by the Plant Safety Review Committee (PSRC) and the Safety Review Committee (SRC).

The subject changes have been evaluated by MP&L in accordance with the guidelines of 10 CFR 50.92. On the basis of that evaluation, MP&L has determined that the subject changes involve no "significant hazard consideration." Justification for this determination is provided in the attached information.

Following your review and authorization to incorporate the requested changes, MP&L will implement the affect specifications. Immediate implementation following NRC review and approval is MP&L's intention except in cases where the subject changes must await (1) the implementation of a design modification or (2) the development of implementing surveillance procedures. In general, every effort will be made to accomplish the expeditious implementation of the requested changes following NRC review and approval.

Yours truly,

L. F. Dale
Manager of Nuclear Services

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PDR ADOCK 05000416
P PDR

GWD/JGC/JDR:sap
Attachment

cc: (See Next Page)

B001
1/40

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TRANSMITTAL OF PROPOSED CHANGES
TO GRAND GULF TECHNICAL SPECIFICATIONS

1. (GGNS - 63, 243, 655)

SUBJECT: Technical Specification Table 4.3.3.1-1, pages 3/4 3-31, 3/4 3-32, and 3/4 3-33.

DISCUSSION: Footnotes (c) and (d) are indicated in the present Technical Specifications in regard to the CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION for the manual initiation function for the Division I LPCI mode of RHR and the LPCS system, and for the Division 2 LPCI modes of RHR. These footnotes are listed in the Notation section of Table 4.3.3.1-1. Each footnote refers to "the LPCS and LPCI injection valve interlocks". The present GGNS design does not have the referenced LPCS and LPCI injection valve interlocks and, as a result, these footnotes should be deleted.

The present footnote (b) on Table 4.3.3.1-1 reads as follows:

"(b) Manual initiation switches shall be tested at least once per 18 months during shutdown. All other circuitry associated with manual initiation shall receive a CHANNEL FUNCTIONAL TEST at least once per 31 days as a part of circuitry required to be tested for automatic system actuation."

The first sentence of footnote (b) requires testing of the manual initiation switches at least once per 18 months during shutdown. The present CHANNEL FUNCTIONAL TEST frequency for LPCI modes of RHR, LPCS, ADS Trip Systems "A" and "B", and HPCS manual initiation is specified as monthly (M). The frequency should be changed to refueling (R) to agree with footnote (b) and current system design. The second sentence of footnote (b) does not apply to LPCI and LPCS manual initiation since the injection valve interlocks are not installed and cannot be tested. Also, the second sentence of footnote (b) is redundant for ADS Trip Systems "A" and "B" and for HPCS since all circuitry associated with systems initiation is tested when CHANNEL FUNCTIONAL TESTS are conducted on a monthly frequency on the remaining actuation instrumentation for each system. LPCI, LPCS, ADS, and HPCS system automatic initiation circuitry testing is not affected by this Technical Specification change. Footnote (b) is deleted since the requirements of its first sentence are incorporated into the table and the second sentence does not apply to current system design.

The channel calibration frequency for LPCI and LPCS which presently is indicated as quarterly (Q), should be changed to NA. The quarterly frequency was also associated with the nonexistent injection valve interlocks.

JUSTIFICATION: The present GGNS design does not include the injection valve interlocks on the manual (system level) initiation for LPCI and LPCS. Therefore, the present Technical Specifications should be changed to reflect the GGNS design. Grand Gulf Nuclear Station - Unit 1 Facility Operating License No. NPF-13, paragraph 2.C(21) requires the installation of low pressure systems injection valve pressure interlocks prior to unit startup following the first refueling outage. A Technical Specification change will be proposed at a later date in support of the anticipated design change to meet this Operating License Condition.

Footnote (b) should be deleted on Table 4.3.3.1-1 since the first sentence of the footnote has been incorporated into the CHANNEL FUNCTIONAL TEST frequency requirements and the second sentence of the footnote does not apply to LPCI and LPCS; and is redundant for ADS and HPCS.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change is purely administrative and designed to achieve consistency in regard to the frequency of the testing interval of the manual initiation switches throughout the Technical Specification. Additionally, the deletion of footnotes (c) and (d) is a correction to the Technical Specification as the current GGNS design does not include the referenced LPCS and LPCI injection valve interlocks. This change therefore establishes consistency between the Technical Specifications and system design as described in the GGNS FSAR such that a significant reduction in safety margin is not involved. This change does not involve a significant increase in the probability or consequences of an accident previously evaluated nor does it create the possibility of a new or different kind of accident from any accident previously evaluated. Therefore, this change does not constitute a significant hazards consideration.

NOTE: Technical Specification page changes marked with a PCOL number and circled are changes that were previously submitted to the NRC.

TABLE 4.3.3.1-1

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

TRIP FUNCTION	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
A. DIVISION 1 TRIP SYSTEM				
1. RHR-A (LPCI MODE) AND LPCS SYSTEM				
a. Reactor Vessel Water Level - Low Low Low, Level 1	S	M	R(a)	1, 2, 3, 4*, 5*
b. Drywell Pressure - High	S	M	R(a)	1, 2, 3
c. LPCI Pump A Start Time Delay Relay	NA	M	Q	1, 2, 3, 4*, 5*
d. Manual Initiation	NA	R ~~M(b)(c)~~	NA ~~Q(d)~~	1, 2, 3, 4*, 5*
2. AUTOMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "A"#				
a. Reactor Vessel Water Level - Low Low Low, Level 1	S	M	R(a)	1, 2, 3
b. Drywell Pressure-High	S	M	R(a)	1, 2, 3
c. ADS Timer	NA	M	Q	1, 2, 3
d. Reactor Vessel Water Level - Low, Level 3	S	M	R(a)	1, 2, 3
e. LPCS Pump Discharge Pressure-High	S	M	R	1, 2, 3
f. LPCI Pump A Discharge Pressure-High	S	M	R(a)	1, 2, 3
g. Manual Initiation	NA	R ~~M(b)~~	NA	1, 2, 3
B. DIVISION 2 TRIP SYSTEM				
1. RHR B AND C (LPCI MODE)				
a. Reactor Vessel Water Level - Low Low Low, Level 1	S	M	R(a)	1, 2, 3, 4*, 5*
b. Drywell Pressure - High	S	M	R(a)	1, 2, 3
c. LPCI Pump B Start Time Delay Relay	NA	M	Q	1, 2, 3, 4*, 5*
d. Manual Initiation	NA	R ~~M(b)(c)~~	NA ~~Q(d)~~	1, 2, 3, 4*, 5*

1. (GGNS-63,243,655)

TABLE 4.3.3.1-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

TRIP FUNCTION	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
B. DIVISION 2 TRIP SYSTEM (Continued)				
2. AUTOMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "B"#				
a. Reactor Vessel Water Level - Low Low Low, Level 1	S	M	R(a)	1, 2, 3
b. Drywell Pressure-High	S	M	R(a)	1, 2, 3
c. ADS Timer	NA	M	Q	1, 2, 3
d. Reactor Vessel Water Level - Low, Level 3	S	M	R(a)	1, 2, 3
e. LPCI Pump B and C Discharge Pressure-High	S	M	R(a)	1, 2, 3
f. Manual Initiation	NA	~~R M(b)~~	NA	1, 2, 3
C. DIVISION 3 TRIP SYSTEM				
1. HPCS SYSTEM				
a. Reactor Vessel Water Level - Low Low, Level 2	S	M	R(a)	1, 2, 3, 4*, 5*
b. Drywell Pressure-High	S	M	R(a)	1, 2, 3
c. Reactor Vessel Water Level-High, Level 8	S	M	R(a)	1, 2, 3, 4*, 5*
d. Condensate Storage Tank Level - Low	S	M	R(a)	1, 2, 3, 4*, 5*
e. Suppression Pool Water Level - High	S	M	R(a)	1, 2, 3, 4*, 5*
f. Manual Initiation	NA	~~R M(b)~~	NA	1, 2, 3, 4*, 5*
D. LOSS OF POWER				
1. Division 1 and 2				
a. 4.16 kV Bus Undervoltage (Loss of Voltage)	NA	M	R	1, 2, 3, 4**, 5**
b. 4.16 kV Bus Undervoltage (BOP Load Shed)	NA	M	R	1, 2, 3, 4**, 5**
c. 4.16 kV Bus Undervoltage (Degraded Voltage)	NA	M	R	1, 2, 3, 4**, 5**
2. Division 3				
a. 4.16 kV Bus Undervoltage (Loss of Voltage)	NA	NA	R	1, 2, 3, 4**, 5**

1. (66NS-63, 243, 655)

1. (GGNS-63, 243, 655)

TABLE 4.3.3.1-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

NOTATION

Not required to be OPERABLE when reactor steam dome pressure is less than or equal to 135 psig.

* When the system is required to be OPERABLE, ~~after being manually realigned, as applicable,~~ per Specification 3.5.2x or 3.5.3 (Applicable)

** Required when ESF equipment is required to be OPERABLE.

(a) Calibrate trip unit at least once per 31 days.

~~(b) Manual initiation switches shall be tested at least once per 18 months during shutdown. All other circuitry associated with manual initiation shall receive a CHANNEL FUNCTIONAL TEST at least once per 31 days as a part of circuitry required to be tested for automatic system actuation.~~

~~(c) Manual initiation test shall include verification of the OPERABILITY of the LPCS and LPCI injection valve interlocks.~~

~~(d) This calibration shall consist of the CHANNEL CALIBRATION of the LPCS and LPCI injection valve interlocks with the interlock setpoint verified to be ≤ 150 psig.~~

Prot 82/03 249

2. (GGNS - X23)

SUBJECT: New Technical Specification 3.7.10 and Surveillance Requirement 4.7.10, page 3/4 7-45.

DISCUSSION: Supplement 1 to the Grand Gulf Safety Evaluation Report requires that the provisions of Regulatory Guide 1.127, "Inspection of Water Control Structures Associated with Nuclear Power Plants" be implemented by Technical Specifications for the downstream access road slope at Culvert No. 1 and the drainage basin slopes for a distance of 400 feet upstream of the inlet to Culvert No. 1. This proposed Technical Specification change includes provisions for monitoring the affected embankments to ensure that Culvert No.1 is not blocked. Included in the proposed change is a yearly visual inspection, a five year survey, and special inspections after occurrence of significant earthquakes, hurricanes, tornados, or intense local rainfalls.

JUSTIFICATION: The proposed change to the Technical Specifications is made to comply with the requirements of Supplement 1 to the Grand Gulf Safety Evaluation Report. The proposed change implements the requirements of Regulatory Guide 1.127 for frequency of inspections. The 15% of cross sectional area criteria was chosen to be conservative with FSAR assumptions for Culvert No. 1 blockage and subsequent flooding from a probable maximum flood. FSAR Section 2.4.3.5.2 states that the possibility of a substantial amount of blockage of Culvert No. 1 is highly unlikely because the channel is lined up to the 100-year flood level and riprap is placed above the concrete. The FSAR assumes that with about 45% blockage of the culvert entrance area, flooding will still be confined below evaluation 132.8 feet.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change to the Technical Specifications constitutes an additional limitation or control over existing provisions. This change is proposed to comply with the requirements of Supplement 1 to the Grand Gulf Safety Evaluation Report and implements Regulatory Guide 1.127 for frequency of inspections. The 15% of cross-sectional area criteria is conservative with respect to FSAR assumptions. This change does not involve a significant reduction in safety margin and it does not involve a significant increase in the probability or consequences of an accident previously evaluated nor does it create the possibility of a new or different kind of accident from any accident previously evaluated. Therefore, this change does not constitute a significant hazards consideration.

2.(GGNS-X23)

PLANT SYSTEMS

3/4.7.10 EMBANKMENT STABILITY

LIMITING CONDITION FOR OPERATION

3.7.10 The downstream access road slope at Culvert No. 1 and the drainage basin slopes for a distance of 400 feet upstream of Culvert No.1 inlet shall remain stable.

APPLICABILITY: At all times.

ACTION: If Culvert No. 1 has blockage exceeding 15% of its cross-sectional area, the Culvert shall be cleaned and the slope embankments verified to be stable.

SURVEILLANCE REQUIREMENTS

4.7.10 The downstream access road slope at Culvert No. 1 and the drainage basin slopes for a distance of 400 feet upstream of the Culvert No. 1 inlet shall be confirmed to be stable by:

a. At least once per year, performing a visual inspection of the embankments and Culvert No. 1.

b. At least once per five years, performing a five-year survey to confirm no significant degradation to the base-line data.

c. Following the occurrence of significant earthquakes, hurricanes, tornados, or intense local rainfalls, a visual inspection of the embankments and Culvert No. 1 will be made. If this special inspection reveals evidence of change, a survey will be performed to confirm no significant degradation to the base-line data.

3. DELETED

4. (GGNS - 296, 780)

SUBJECT: Technical Specification Table 3.3.2-2, page 3/4 3-15, 3/4 3-16, 3/4 3-17.

DISCUSSION: The Trip Setpoint and Allowable Values presently shown in Table 3.3.2-2 are based on calculated nominal values. The proposed revisions in the Trip Setpoints and Allowable Values are to correct calculations and to reflect instrument loop accuracies and tolerances. In addition, the "**" note is applied to the remaining equipment area and room temperature Trip Setpoints and Allowable Values in order to indicate these are initial setpoints. As such they are subject to revision based on data to be obtained during the startup test program. In the present Table 3.3.2-2, the RWCU Demin Valve Room is assumed to be part of the RWCU valve nest room. This is an error and is corrected in the proposed change by adding the RWCU Demin Valve room as a separate table item.

JUSTIFICATION: The change in the Trip Setpoint and Allowable Value reflect corrections to calculations and as-built instrument loop accuracies. The addition of the "**" note to the equipment area temperatures and differential temperature is to indicate that these values are to be considered as initial values based on calculation and will be confirmed or adjusted during the startup test program. The addition of the RWCU Demin Valve room as a separate item in the table corrects an ommission in the present version of Table 3.3.2-2.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed changes to the Technical Specifications represent a refinement in the Trip Setpoint and Allowable Values to reflect actual plant conditions rather than nominal values. The addition of the "**" note to the additional table items is an administrative change in that it identifies these values as initial setpoints to be verified or adjusted during the startup test program. The addition of the RWCU Demin Valve room corrects an original ommission in the table. None of these changes result in a reduction in margin of safety. These changes also do not involve a significant increase in the probability of an accident previously evaluated nor the possibility of a new or different kind of accident from any accident previously evaluated. Therefore, these changes do not constitute a significant hazards consideration.

TABLE 3.3.2-2

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

TRIP FUNCTION	TRIP SETPOINT	ALLOWABLE VALUE
1. PRIMARY CONTAINMENT ISOLATION		
a. Reactor Vessel Water Level - Low Low, Level 2	≥ -41.6 inches *	≥ -43.8 inches
b. Drywell Pressure - High	≤ 1.73 psig	≤ 1.93 psig
c. Containment and Drywell Ventilation Exhaust Radiation - High (High)	≤ 2.0 mr/hr**	≤ 4.0 mr/hr**
d. Manual Initiation	NA	NA
2. MAIN STEAM LINE ISOLATION		
a. Reactor Vessel Water Level - Low Low Low, Level 1	≥ -150.3 inches*	≥ -152.5 inches
b. Main Steam Line Radiation - High	≤ ~~1.5~~ 3.0 x full power background	≤ ~~3.0~~ 3.6 x full power background
c. Main Steam Line Pressure - Low	≥ 849 psig	≥ 837 psig
d. Main Steam Line Flow - High	≤ 169 psid	≤ 176.5 psid
e. Condenser Vacuum - Low	≥ 9 inches Hg. Vacuum	≥ 8.7 inches Hg. Vacuum
f. Main Steam Line Tunnel Temperature - High	≤ ~~180~~ 185 °F**	≤ ~~186~~ 191 °F**
g. Main Steam Line Tunnel Δ Temp. - High	≤ ~~80~~ 101 °F**	≤ ~~83~~ 104 °F**
h. Manual Initiation	NA	NA
3. SECONDARY CONTAINMENT ISOLATION		
a. Reactor Vessel Water Level - Low Low, Level 2	≥ -41.6 inches*	≥ -43.8 inches
b. Drywell Pressure - High	≤ 1.73 psig	≤ 1.93 psig
c. Fuel Handling Area Ventilation Exhaust Radition - High High	≤ 2.0 mR/hr**	≤ 4.0 mR/hr**
d. Fuel Handling Area Pool Sweep Exhaust Radiation - High High	≤ 18 mR/hr**	≤ 35 mR/hr**
e. Manual Initiation	NA	NA

ACOL 83/03 303

ACOL 83/03 173, 237

4. (GGNS-296, 780)

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

TRIP FUNCTION	TRIP SETPOINT	ALLOWABLE VALUE
4. REACTOR WATER CLEANUP SYSTEM ISOLATION		
a. Δ Flow - High	≤ 79 gpm	≤ ~~88~~ 89 gpm
b. Δ Flow Timer	≤ 45 seconds	≤ 57 seconds
c. Equipment Area Temperature - High		
1. RWCU Hx Room	≤ 124°F**	≤ 130°F**
2. RWCU Pump Rooms	≤ 174°F**	≤ 180°F**
3. RWCU Valve Nest Rooms	≤ 139°F**	≤ 145°F**
4. RWCU Demin. Rooms	≤ 139°F**	≤ 145°F**
5. RWCU Rec. Tank Room	≤ 139°F**	≤ 145°F**
6. RWCU DEMIN. VALVE ROOM	≤ 135°F**	≤ 141°F**
d. Equipment Area Δ Temp. - High		
1. RWCU Hx Room	≤ 65°F**	≤ 66°F**
2. RWCU Pump Rooms	≤ ~~110°F~~ 115°F**	≤ ~~113°F~~ 118°F**
3. RWCU Valve Nest Rooms	≤ 70°F**	≤ 73°F**
4. RWCU Demin Rooms	≤ 70°F**	≤ 73°F**
5. RWCU Rec. Tank Room	≤ 70°F**	≤ 73°F**
6. RWCU DEMIN. VALVE ROOM	≤ 71°F**	≤ 74°F**
e. Reactor Vessel Water Level - Low Low, Level 2	≥ -41.6 inches*	≥ -43.8 inches
f. Main Steam Line Tunnel Ambient Temperature - High	≤ ~~179°F**~~ 185°F**	≤ ~~185°F**~~ 191°F**
g. Main Steam Line Tunnel Δ Temp. - High	≤ ~~75°F**~~ 101°F**	≤ ~~78°F**~~ 104°F**
h. SLCS Initiation	NA	NA
i. Manual Initiation	NA	NA
5. REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION		
a. RCIC Steam Line Flow - High	≤ ~~318"~~ 363" H_2O	≤ ~~324"~~ 371" H_2O
b. RCIC Steam Supply Pressure - Low	≥ 60 psig	≥ 53 psig
c. RCIC Turbine Exhaust Diaphragm Pressure - High	≤ 10 psig	≤ 20 psig

PCOL 83/09 #99

PCOL 83/09 #88

4. (GGNS-296, 780)

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

TRIP FUNCTION	TRIP SETPOINT	ALLOWABLE VALUE
REACTOR CORE ISOLATION COOLING SYSTEM (Continued)		
d. RCIC Equipment Room Ambient Temperature - High	≤ 189°F**	≤ 195°F**
e. RCIC Equipment Room Δ Temp. - High	≤ 125°F**	≤ 128°F**
f. Main Steam Line Tunnel Ambient Temperature - High	≤ ~~179~~ 185°F**	≤ ~~185~~ 191°F**
g. Main Steam Line Tunnel Δ Temp. - High	≤ ~~75~~ 101°F**	≤ ~~78~~ 104°F**
h. Main Steam Line Tunnel Temperature Timer	≤ 30 minutes	≤ 30 minutes
i. RHR Equipment Room Ambient Temperature - High	≤ 169°F**	≤ 175°F**
j. RHR Equipment Room Δ Temperature - High	≤ 105°F**	≤ 108°F**
k. RHR/RCIC Steam Line Flow - High	≤ 145" H_2O	≤ ~~161~~ 160" H_2O
l. Manual Initiation	NA	NA
6. RHR SYSTEM ISOLATION		
a. RHR Equipment Room Ambient Temperature - High	≤ 169°F**	≤ 175°F**
b. RHR Equipment Room Δ Temperature - High	≤ 105°F**	≤ 108°F**
c. Reactor Vessel Water Level - Low, Level 3	≥ 11.4 inches*	≥ 10.8 inches
d. Reactor Vessel (RHR Cut-in Permissive) Pressure - High	≤ 135 psig	≤ 150 psig
e. Drywell Pressure - High	≤ 1.73 psig	≤ 1.93 psig
f. Manual Initiation	NA	NA

PCN 3709 498

4. (296, 780)

*See Bases Figure B 3/4 3-1.

**Initial setpoint. Final setpoint to be determined during startup test program. Any required change to this setpoint shall be submitted to the Commission within 90 days of test completion.

5. (GGNS 509b)

SUBJECT: Technical Specification Table 3.3.3-2, page 3/4 3-28.

DISCUSSION: The Trip Setpoint and Allowable Value for trip functions:

A.1.c LPCI Pump A Start Time Delay Relay, and
B.1.c LPCI Pump B Start Time Delay Relay

are presently in Table 3.3.3-2 as less than or equal to 5 seconds. The Grand Gulf design for LPCI pump A&B start circuits presently has two time delay (each 5 seconds plus tolerance) relay contacts in a series arrangement. One time delay is supplied by the NSSS vendor and the other comes from the Load Shed and Sequencing Panel (LSSP) supplied by the Architect/Engineer. Both time delay relay contacts in each LPCI A&B pump start circuits must close before that pump will start.

The A/E and NSSS supplied timers are 5 second devices plus a tolerance. The proposed ±0.25 assigned tolerance is conservative with respect to instrument drift and also allows for the 5 second margin between sequencing on of load groups once bus voltage is available.

JUSTIFICATION: The present design for the LPCI A&B pump start circuits contains two series arranged time delay relay contacts. Both time delays perform the same function of sequencing LPCI pumps A&B onto their respective buses. The less than or equal to 5.25 second Allowable Value proposed for the LPCI Pump A&B Time Delay Relay takes into consideration device accuracy and drift. This change could increase the start time delay of the LPCI pumps A&B by 0.25 seconds. This 0.25 second increase in LPCI pump A&B start time delay has been verified by the A/E, NSSS vendor and actual plant data as not impacting FSAR accident analysis times for LPCI pumps to rated speed (less than 27 seconds) and rated flow (less than 40 seconds). Additionally, the NSSS vendor has performed a reanalysis of the LPCI system performance in support of adding high pressure interlocks to prevent opening injection valves until reactor pressure is below LPCI system design pressures. This reanalysis indicates that based on the assumptions of the LPCI injection valve not being fully open until 53 seconds after accident initiation and no credit taken for LPCI flow until this valve is fully open, adequate LPCI system performance is achieved in accident conditions. Thus the added 0.25 second to LPCI pumps A&B start times is not significant.

SIGNIFICANT HAZARDS CONSIDERATION:

A reanalysis of the LPCI system performance shows that LPCI system performance is achieved under accident conditions even if the injection valves are not fully open until 53 seconds. The proposed Allowable Value of less than or equal to 5.25 seconds is not significant in light of this analysis. The probability or consequences of an accident previously evaluated is not increased nor is the possibility of a new or different kind of accident from any accident previously evaluated created. This change will not significantly reduce the margin of safety. The proposed change therefore does not involve any significant hazards considerations.

NOTE: Technical Specification page changes marked with a PCOL number and circled are changes that were previously submitted to the NRC.

TABLE 3.3.3-2.

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SETPOINTS

TRIP FUNCTION	TRIP SETPOINT	ALLOWABLE VALUE
A. DIVISION 1 TRIP SYSTEM		
1. RHR-A (LPCI MODE) AND LPCS SYSTEM		
a. Reactor Vessel Water Level - Low Low Low, Level 1	≥ -150.3 inches*	≥ -152.5 inches
b. Drywell Pressure - High	≤ 1.89 psig	≤ 1.94 psig
c. LPCI Pump A Start Time Delay Relay	≤ 5 seconds	≤ ~~6~~ 5.25 seconds
d. Manual Initiation	NA	NA
2. AUTOMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "A"		
a. Reactor Vessel Water Level - Low Low Low, Level 1	≥ -150.3 inches*	≥ -152.5 inches
b. Drywell Pressure - High	≤ 1.89 psig	≤ 1.94 psig
c. ADS Timer	≤ ~~115~~ 105 seconds	≤ 117 seconds
d. Reactor Vessel Water Level-Low, Level 3	≥ 11.4 inches*	≥ 10.8 inches
e. LPCS Pump Discharge Pressure-High	~~≥~~ 145 psig, increasing	125-165 psig ~~≥ 140 psig, increasing~~
f. LPCI Pump A Discharge Pressure-High	~~≥~~ 125 psig, increasing	115-135 psig ~~≥ 122 psig, increasing~~
g. Manual Initiation	NA	NA
B. DIVISION 2 TRIP SYSTEM		
1. RHR B AND C (LPCI MODE)		
a. Reactor Vessel Water Level - Low Low Low, Level 1	≥ -150.3 inches*	≥ -152.5 inches
b. Drywell Pressure - High	≤ 1.89 psig	≤ 1.94 psig
c. LPCI Pump B Start Time Delay Relay	≤ 5 seconds~~**~~	≤ ~~6~~ 5.25 seconds
d. Manual Initiation	NA	NA
2. AUTOMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "B"		
a. Reactor Vessel Water Level - Low Low Low, Level 1	≥ -150.3 inches*	≥ -152.5 inches
b. Drywell Pressure - High	≤ 1.89 psig	≤ 1.94 psig
c. ADS Timer	≤ ~~115~~ 105 seconds	≤ 117 seconds
d. Reactor Vessel Water Level-Low, Level 3	≥ 11.4 inches*	≥ 10.8 inches
e. LPCI Pump B and C Discharge Pressure-High	~~≥~~ 125 psig, increasing	115-135 psig ~~≥ 122 psig, increasing~~
f. Manual Initiation	NA	NA
C. DIVISION 3 TRIP SYSTEM		
1. HPCS SYSTEM		
a. Reactor Vessel Water Level - Low Low, Level 2	≥ -41.6 inches*	≥ -43.8 inches
b. Drywell Pressure - High	≤ 1.89 psig	≤ 1.94 psig
c. Reactor Vessel Water Level - High, Level 8	≤ 53.5 inches*	≤ 55.7 inches
d. Condensate Storage Tank Level - Low	≥ 0 inches	≥ -3 inches
e. Suppression Pool Water Level - High	≤ 5.5 inches	≤ 6.5 inches
f. Manual Initiation	NA	NA

PCOL 83/09 495

PCOL 83/05 219a

PCOL 83/09 495

PCOL 83/03 51

5. (GGNS-509b)

6. (GGNS - 697)

SUBJECT: Technical Specification Tables 3.3.7.1-1, 4.3.7.1-1, 3.3.7.12-1, and 4.3.7.12-1, and Surveillance Requirement 4.11.2.7.1, pages 3/4 3-56 through 59 and 3/4 3-90 through 3/4 3-95, and 3/4 11-17.

DISCUSSION: The pre-treatment and post-treatment offgas radiation monitoring instrumentation appear in all four of the subject tables. However, the Technical Specifications that apply to each instrument are not consistent among the tables. The proposed changes combine specifications for the pre-treatment and post-treatment offgas radiation monitoring instrumentation and place them only in Tables 3.3.7.1-1 and 4.3.7.1-1. The specifications regarding these instruments in Tables 3.3.7.12-1 and 4.3.7.12-1 have been incorporated into Tables 3.3.7.1-1 and 4.3.7.1-1, as applicable. The justification section discusses the proposed changes and the reasons for the changes.

JUSTIFICATION: The pre-treatment and post-treatment offgas radiation monitors are "radiation monitoring instrumentation" and logically belong in Tables 3.3.7.1-1 and 4.3.7.1-1 for Radiation Monitoring Instrumentation and Radiation Monitoring Instrumentation Surveillance Requirements, respectively. However, neither instrument performs a "radioactive gaseous effluent monitoring" function, as such, and should not be included in Tables 3.3.7.12-1 and 4.3.7.12-1 for Radioactive Gaseous Effluent Monitoring Instrumentation and Radioactive Gaseous Effluent Monitoring Instrumentation Surveillance Requirements, respectively. The offgas system discharges into the radwaste building exhaust ventilation system and is monitored for effluent release by the radwaste building ventilation monitoring system which has specifications in Tables 3.3.7.12-1 and 4.3.7.12-1. The changes are justified in order to prevent confusion with the existing conflicting action, applicability, minimum channels OPERABLE, and Surveillance Requirements among the subject tables for the same instrumentation.

The proposed changes to Tables 3.3.7.1-1 and 3.3.7.12-1 are as follows:

1. For the Offgas Pre-Treatment Radiation Monitor in Table 3.3.7.1-1, add "###" note to the Applicable Conditions and to the bottom of page 3/4 3-57. This note was moved from Table 3.3.7.12-1 where it is the "***" note on pages 3/4 3-90 and 3/4 3-91. This "***" note should be deleted from Table 3.3.7.12-1. The ACTION statement number for the Offgas Pre-Treatment Radiation Monitor should be changed from the present 70 to 76. New ACTION statement 76 is added to page 3/4 3-58 and combines the requirements of the present ACTION statements 70 on page 3/4 3-58 and 125 on page 3/4 3-91. ACTION statement 125 on page 3/4 3-91 is deleted since it is no longer required for Table 3.3.7.12-1.

2. For the Offgas Post-Treatment Radiation Monitor on Table 3.3.7.1-1 change the Instrumentation title to match the same instrument on Table 3.3.7.12-1 or to read as follows:

"4. Offgas Post-Treatment Monitor

a. Noble Gas Activity Monitor Providing Alarm and Automatic Termination of Release."

Add note "##" to the Applicable Conditions and to the bottom of page 3/4 3-57. This note was copied from Table 3.3.7.12-1 where it also applied to this instrumentation. ACTION statement 71 on Table 3.3.7.1-1 is modified to incorporate the requirements of ACTION statement 121 from Table 3.3.7.12-1 for the Offgas Post-Treatment Monitor. The present requirement in ACTION statement 71 on Table 3.3.7.1-1 to be in at least HOT SHUTDOWN within 12 hours with both of the required monitors inoperable was deleted because effluent monitoring is performed by the Radwaste Ventilation monitoring system which is downstream of the offgas system.

3. Delete all the specifications on page 3/4 3-90 in Table 3.3.7.12-1.

4. Delete the "***" note and ACTION 125 on page 3/4 3-91 in Table 3.3.7.12-1.

The proposed changes to Table 4.3.7.1-1 and 4.3.7.12-1 are as follows:

1. For the Offgas Pre-Treatment Radiation Monitor in Table 4.3.7.1-1 add note (g), ### and # to the monthly CHANNEL FUNCTIONAL TEST and to page 3/4 3-59a. These notes apply to the same instrument on Table 4.3.7.12-1. Table 4.3.7.12-1 requires a quarterly CHANNEL FUNCTIONAL TEST for the Offgas Pre-Treatment Radiation Monitor whereas Table 4.3.7.1-1 requires this test on a monthly frequency. Since the monthly test satisfies the frequency requirements of both tables, it was chosen as the CHANNEL FUNCTIONAL TEST frequency. Table 4.3.7.12-1 requires a monthly Source Check for the Offgas Pre-Treatment Radiation Monitor and this check is added to the monthly CHANNEL FUNCTIONAL TEST on Table 4.3.7.1-1 by note "###". Note "#" allows deferral of the monthly CHANNEL FUNCTIONAL TEST due to high radiation and was incorporated into Table 4.3.7.1-1 from Table 4.3.7.12-1. The Sensor Calibration notes from Table 4.3.7.12-1 are added to Table 4.3.7.1-1 as notes (h) and "##". Note "****" is added to the OPERATIONAL CONDITIONS for which Surveillance Requirement in Table 4.3.7.1-1 and on page 3/4 3-59a and was transferred from Table 4.3.7.12-1 (note ***). The channel check required on a shift basis in Table 4.3.7.1-1 satisfies the daily requirement on Table 4.3.7.12-1.

2. For the Offgas Post-Treatment Radiation Monitor on Table 4.3.7.1-1 add notes (f) and ### to the CHANNEL FUNCTIONAL TEST and to page 3/4 3-59a. These notes were moved from Table 4.3.7.12-1. Table 4.3.7.12-1 requires a quarterly CHANNEL FUNCTIONAL TEST whereas Table 4.3.7.1-1 requires this test on a monthly frequency. Since the monthly test satisfies the frequency requirements of both tables, it was chosen as the CHANNEL FUNCTIONAL TEST frequency. Table 4.3.7.12-1 requires a monthly Source Check and this is added to the monthly CHANNEL FUNCTIONAL TEST on Table 4.3.7.1-1 by note "###". The sensor calibration note from Table 4.3.7.12-1 is added to table 4.3.7.1-1 as note (h). Note "***" is added to the OPERATIONAL CONDITIONS for which Surveillance Requirement in Table 4.3.7.1-1 and was transferred from Table 4.3.7.12-1 (note **). Note "*" on page 3/4 3-94 is an error and should be "**". The Channel Checks required on a shift basis in Table 4.3.7.1-1 satisfies the daily required on Table 4.3.7.12-1.

3. Add new page 3/4 3-59a to Table 4.3.7.1-1 to contain the new table notations incorporated from Table 4.3.7.12-1.

4. On Table 4.3.7.12-1, page 3/4 3-94, delete the Specifications for the Offgas Pre-Treatment and Post-Treatment Monitors.

5. On page 3/4 3-95 delete notes ***, #, ##, and (1). Re-number notes (2), (3), and (4) to (1), (2), and (3) here and on pages 3/4 3-92 and 93.

6. On page 3/4 3-95 at the top of the page, change 4.3.7.12-2 to 4.3.7.12-1. This is a typographical error.

ACTION statement b of Specification 3.3.7.12 requires reporting of inoperable instrumentation (not restored in time requirements) in the next Semiannual Radioactive Effluent Release Report. This requirement was not carried over to Table 3.3.7.1-1 for the Offgas Pre-Treatment and Post-Treatment monitors because these monitors are not effluent release monitors.

Technical Specification Surveillance Requirement 4.11.2.7.1 references Specification 3.3.7.12 for monitoring the outlet of the main condenser air ejector releases. Since the Offgas Pre-Treatment and Post-Treatment monitors have been placed only on Table 3.3.7.1-1, reference to Specification 3.3.7.12 should be changed to Specification 3.3.7.1.

The ACTION statement for Specification 3.11.2.7 incorrectly lists the metastable state of Kr as Kr-87m. The correct metastable state is Kr-85m as stated in Specification 3.11.2.7.

SIGNIFICANT HAZARDS CONSIDERATION:

This change is made to promote consistency in the Technical Specifications, to avoid any unnecessary confusion and to reduce the possibility of mis-interpretation of conflicting statements. This change is purely administrative in that it combines two specifications into one and does not remove any requirements from the Technical Specifications. This change does not involve a reduction of safety margins and no significant increase in the probability or consequences of an accident previously evaluated is involved nor is the possibility of a new or different kind of accident from any accident previously evaluated created. Thus the proposed change to the Technical Specifications does not involve any significant hazards considerations.

TABLE 3.3.7.1-1

RADIATION MONITORING INSTRUMENTATION

INSTRUMENTATION	MINIMUM CHANNELS OPERABLE	APPLICABLE CONDITIONS	ALARM/TRIP SETPOINT	MEASUREMENT RANGE	ACTION
1. Component Cooling Water Radiation Monitor	1	At all times	$\leq 1 \times 10^5$ cpm/NA	~~1~~ 10 to 10^6 cpm	70
2. Standby Service Water System Radiation Monitor	1/heat exchanger train	1, 2, 3, and*	$\leq 1 \times 10^5$ cpm/NA	~~1~~ 10 to 10^6 cpm	70
3. Offgas Pre-treatment Radiation Monitor	1	1, 2 and ###	$\leq 5 \times 10^3$ mR/hr/NA	1 to 10^6 mR/hr	~~70~~ 76
4. Offgas Post-treatment ~~Radiation~~ Monitor	2(a)	1, 2 and ##	$\leq 1 \times 10^5$ cpm (Hi), $\leq 1.0 \times 10^6$ cpm (Hi Hi)	~~1~~ 10 to 10^6 cpm	71
5. Carbon Bed Vault Radiation Monitor	1	1, 2	$\leq$ 2 x full power background/NA	1 to 10^6 mR/hr	72
6. Control Room Ventilation Radiation Monitor	2 per Trip System	1,2,3,5 and**	$\leq$4 mR/hr/ $\leq$5 mR/hr#	10^{-2} to 10^2 mR/hr	73
7. Containment and Drywell Ventilation Exhaust Radiation Monitor	3(a)h	At all times	$\leq$2.0 mR/hr/ $\leq$4 mR/hr(b)#	10^{-2} to 10^2 mR/hr	74
8. Fuel Handling Area Ventilation Exhaust Radiation Monitor	3(a)h	1,2,3,5 and**	$\leq$ 2mR/hr/ $\leq$4 mR/hr(d)#	10^{-2} to 10^2 mR/hr	75
9. Fuel Handling Area Pool Sweep Exhaust Radiation Monitor	3(a)h	(c)	$\leq$ 18 mR/hr/ $\leq$35 mR/hr(d)#	10^{-2} to 10^2 mR/hr	75

a. Noble Gas Activity, Providing Alarm and Automatic Termination of Release

PCOL 83/03 256

PCOL 83/03 256

PCOL T3/08 528 PCOL T3/08 528 PCOL 83/08 528

6.(GGNS-697)

TABLE 3.3.7.1-1 (Continued)

RADIATION MONITORING INSTRUMENTATION

INSTRUMENTATION	MINIMUM CHANNELS OPERABLE	APPLICABLE CONDITIONS	ALARM/TRIP SETPOINT	MEASUREMENT RANGE	ACTION
10. Area Monitors					
a. Fuel Handling Area Monitors					
1) New Fuel Storage Vault	1	(e)	≤2.5 mR/hr/NA	10^{-2} to 10^{3} mR/hr	72
2) Spent Fuel Storage Pool	1	(f)	≤2.5 mR/hr/NA	10^{-2} to 10^{3} mR/hr	72
3) Dryer Storage Area	1	(g)	≤2.5 mR/hr/NA	10^{-2} to 10^{3} mR/hr	72
b. Control Room Radiation Monitor	1	At all times	≤0.5 mR/hr/NA	10^{-2} to 10^{3} mR/hr	72

PCOL 3/4 05 321
PCOL 3/4 08 52A, 322
PCOL 3/4 08 52B
PCOL 3/4 08 321
PCOL 3/4 05 321
PCOL 3/4 08 52B

* ~~With~~ RHR heat exchangers in operation.

** When irradiated fuel is being handled in the Primary or secondary containment.

\# Initial setpoint. Final Setpoint to be determined during startup test program. Any required change to this setpoint shall be submitted to Commission within 90 days after test completion.

(a) Trips system with 2 channels upscale ~~high high~~ Hi-Hi-Hi or one channel upscale Hi-Hi-Hi and one channel ~~inoperative~~, or 2 channels ~~inoperative~~ downscale.

(b) Isolates containment/drywell purge penetrations.

(c) With irradiated fuel in spent fuel storage pool.

(d) Also isolates the ~~secondary containment penetrations~~ {Auxiliary Building and Fuel Handling Area Ventilation Systems.

(e) With fuel in the new fuel storage vault.

(f) With fuel in the spent fuel storage pool.

(g) With fuel in the Dryer Storage Area.

(h) Two upscale Hi-Hi, one upscale Hi-Hi and one downscale, or two downscale signals from the same trip system actuate the trip system and initiate isolation of the associated isolation valves.

During main condenser offgas treatment system operation.

During operation of the main condenser air ejector.

6. (GGNS-697)

INSTRUMENTATION

TABLE 3.3.7.1-1 (Continued)

RADIATION MONITORING INSTRUMENTATION

ACTION

ACTION 70 - With the required monitor inoperable, obtain and analyze at least one grab sample of the monitored parameter at least once per 24 hours.

ACTION 71 -

a. With one of the required monitors inoperable, place the inoperable channel in the downscale tripped condition within one hour.

b. With both of the required monitors inoperable, ~~be in at least HOT SHUTDOWN within 12 hours.~~ effluent releases via this pathway may continue for up to 30 days provided grab samples are taken at least once per 8 hours and these samples are analyzed

ACTION 72- With the required monitor inoperable, perform area surveys of the gross the monitored area with portable monitoring instrumentation at activity least once per 24 hours. within 24 hours

ACTION 73 -

a. With one of the required monitors in a trip system inoperable, place the inoperable channel in the downscale tripped condition within one hour; restore the inoperable channel to OPERABLE status within 7 days, or, within the next 6 hours, initiate and maintain operation of ~~the~~ control room emergency filtration system in the isolation mode of operation. at least one

b. With both of the required monitors, in a trip system inoperable, initiate and maintain operation of ~~the~~ control room emergency filtration system in the isolation mode of operation within one hour. at least one

ACTION 74 -

a. With one of the required monitors inoperable, place the inoperable channel in the downscale tripped condition within one hour.

b. With two of the required monitors inoperable, isolate the containment and drywell purge and vent penetrations within 12 hours.

ACTION 75 -

a. With one of the required monitors inoperable, place the inoperable channel in the downscale tripped condition within one hour.

b. With two of the required monitors inoperable, initiate and maintain operation of at least one standby gas treatment subsystem within 12 hours.

ACTION 76- With the number of channels OPERABLE less than required by the minimum channels OPERABLE requirement, the recombiner effluent may be released to the environment for up to 72 hours provided:

a. At least one grab sample of the monitored parameter is obtained and analyzed at least once per 24 hours, and

b. The offgas system is not bypassed, except for filtration system bypass during plant startups, and

GRAND GULF-UNIT 1 3/4 3-58

c. The offgas post-treatment noble gas activity monitor is OPERABLE; Otherwise, be in at least Hot Standby within 12 hours.

TABLE 4.3.7.1-1

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENTATION	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
1. Component Cooling Water Radiation Monitor	S	M	R	At all times
2. Standby Service Water System Radiation Monitor	S	M	R	1, 2, 3, and*
3. Offgas Pre-treatment Radiation Monitor	S	M(g)####	R(h)##	1, 2, and ****
4. Offgas Post-treatment Radiation Monitor	S	M(f)####	R(h)	1, 2, and ***
5. Carbon Bed Vault Radiation Monitor	S	M	R	1, 2
6. Control Room Ventilation Radiation Monitor	S	M(a)	R	1, 2, 3, 5 and**
7. Containment and Drywell Ventilation Exhaust Radiation Monitor	S	M	R	At all times
8. Fuel Handling Area Ventilation Radiation Monitor	S	M	R	1, 2, 3, 5 and**
9. Fuel Handling Area Pool Sweep Exhaust Radiation Monitor	S	M	R	(b)
10. Area Monitors				
a. Fuel Handling Area Monitors				
1) New Fuel Storage Vault	S	M	R	(c)
2) Spent Fuel Storage Pool	S	M	R	(d)
b. Control Room Radiation Monitor	S	M	R	At all times
3) Dryer Storage Area	S	M	R	(e)

6.(GGNS-697)

PCOL 83/05 321 Replace

* With RHR heat exchangers in operation.

** When irradiated fuel is being handled in the primary or secondary containment.

(a) The CHANNEL FUNCTIONAL TEST shall demonstrate that control room annunciation occurs if any of the following conditions exist.
1. Instrument indicates measured levels above the alarm/trip setpoint.
2. Circuit failure.
3. Instrument indicates a downscale failure.
4. Instrument controls not in Operate mode.

(b) With irradiated fuel in the spent fuel storage pool.

(c) With fuel in the new fuel storage vault.

(d) With fuel in the spent fuel storage pool.

(e) With fuel in the dryer storage Area

(move to page 3/4 3-59a)

PCOL 83/05 321

6.(GGNS-697)

TABLE 4.3.7.1-1 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING
INSTRUMENTATION SURVEILLANCE REQUIREMENTS

TABLE NOTATION

* With RHR heat exchangers in operation.
** When irradiated fuel is being handled in the primary or secondary containment.
*** During main condenser offgas treatment system operation.
**** During operation of main condenser air ejector.
\# SOURCE CHECK may be deferred to the next shutdown of greater than 8 hours duration if unable to be performed at the monthly interval due to inaccessibility because of being in a high radiation area.
The sensor will be calibrated for mr/hr from the calibration standard. The conversion to release rate will be performed during subsequent unit operation, but within one week.
The monthly CHANNEL FUNCTIONAL TEST will include a Source Check.
(a) The CHANNEL FUNCTIONAL TEST shall demonstrate that control room annunciation occurs if any of the following conditions exist.

1. Instrument indicates measured levels above the alarm/trip setpoint.
2. Circuit failure.
3. Instrument indicates a downscale failure.
4. Instrument controls not in Operate mode.

(b) With irradiated fuel in the spent fuel storage pool.
(c) With fuel in the new fuel storage vault.
(d) With fuel in the spent fuel storage pool.
(e) With fuel in the dryer storage area.
(f) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if any of the following conditions exists:

1. Instrument indicates measured levels above the alarm/trip setpoint.
2. Circuit failures.
3. Instrument indicates a downscale failure.
4. Instrument controls not set in operate mode.

(g) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exists:

1. Instrument indicates measured levels above the alarm setpont.
2. Circuit failures.
3. Instrument indicates a downscale failure.
4. Instrument controls not set in operate mode.

(h) The initial CHANNEL CALIBRATION shall be performed using one or more of the reference standards certified by the National Bureau of Standards (NBS) or using standards that have been obtained from suppliers that participate in measurement assurance activities with NBS. These standards shall permit calibrating the system over its intended measurement range. For subsequent CHANNEL CALIBRATION, sources that have been related to the initial calibration shall be used.

TABLE 3.3.7.12-1 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

INSTRUMENT	MINIMUM CHANNELS OPERABLE	APPLICABILITY	ACTION
6. OFFGAS PRE-TREATMENT MONITOR			
a. Noble Gas Activity Monitor	1	***	125 ~~126~~
7. OFFGAS POST-TREATMENT MONITOR			
a. Noble Gas Activity Monitor Providing Alarm and Automatic Termination of Release	1	**	121

Rev 85/03 102, 384

6.(GGNS-697)

6.(GGNS-697)

TABLE 3.3.7.12-1 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

TABLE NOTATION

* At all times.

** During main condenser offgas treatment system operation.

~~*** During operation of the main condenser air ejector.~~

ACTION 121 - With the number of channels OPERABLE less than required by the Minmum Channels OPERABLE requirement, effluent releases via this pathway may continue for up to 30 days provided grab samples are taken at least once per 8 hours and these samples are analyzed for gross activity within 24 hours.

ACTION 122 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, effluent releases via this pathway may continue for up to 30 days provided samples are continuously collected with auxiliary sampling equipment as required by Table 4.11.2.1.2-1.

ACTION 123 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, effluent release via this pathway may continue for up to 30 days provided the flow rate is estimated at least once per 8 hours.

ACTION 124 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, operation of main condenser offgas treatment system may continue for up to 30 days provided grab samples are collected at least once per 4 hours and analyzed within the following 4 hours.

~~ACTION 125 - With the number of channels OPERABLE less than required by the Minimum Channels OPERABLE requirement, suspend release of radioactive effluents via this pathway.~~

~~ACTION 126~~ 125 - ~~With the number of channels OPERABLE less than required by the~~ Minimum Channels OPERABLE requirement, the SJAE effluent may be released to the environment for up to 72 hours provided:

a. The offgas system is not bypassed, except for filtration system bypass during plant startups, and

b. The offgas delay system noble gas activity effluent downstream monitor is OPERABLE;

~~Otherwise, be in at least HOT STANDBY within 12 hours.~~

TABLE 4.3.7.12-1

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	SOURCE CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
1. RADWASTE BUILDING VENTILATION MONITORING SYSTEM					
a. Noble Gas Activity Monitor - Providing Alarm	D	M	R(~~3~~ 2)	Q(~~2~~ 1)	*
b. Iodine Sampler	W	N.A.	N.A.	N.A.	*
c. Particulate Sampler	W	N.A.	N.A.	N.A.	*
d. Flow Rate Monitor	D	N.A.	R	Q	*
e. Sampler Flow Rate Monitor	D	N.A.	R	N.A.	*
2. MAIN CONDENSER OFFGAS TREATMENT SYSTEM EXPLOSIVE GAS MONITORING SYSTEM					
a. Hydrogen Monitor	D	N.A.	Q(~~4~~ 3)	M	**
3. CONTAINMENT VENTILATION MONITORING SYSTEM					
a. Noble Gas Activity Monitor Providing Alarm ~~and Automatic Termination of Release~~	D	M	R(~~3~~ 2)	Q(~~2~~ 1)	*
b. Iodine Sampler	W	N.A.	N.A.	N.A.	*
c. Particulate Sampler	W	N.A.	N.A.	N.A.	*
d. Effluent System Flow Rate Monitor	D	N.A.	R	Q	*
e. Sampler Flow Rate Monitor	D	N.A.	R	N.A.	*

Amd 85/03
102, 384
(GGNS-694)

TABLE 4.3.7.12-1 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	SOURCE CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
4. TURBINE BLDG. VENTILATION MONITORING SYSTEM					
a. Noble Gas Activity Monitor	D	M	R(2)	Q(1)	*
b. Iodine Sampler	W	N.A.	N.A.	N.A.	*
c. Particulate Sampler	W	N.A.	N.A.	N.A.	*
d. Flow Rate Monitor	D	N.A.	R	Q	*
e. Sampler Flow Rate Monitor	D	N.A.	R	N.A.	*
5. FUEL HANDLING AREA VENTILATION MONITORING SYSTEM					
a. Noble Gas Activity Monitor	D	M	R(2)	Q(1)	*
b. Iodine Sampler	W	N.A.	N.A.	N.A.	*
c. Particulate Sampler	W.	N.A.	N.A.	N.A.	*
d. Flow Rate Monitor	D	N.A.	R	Q	*
e. Sampler Flow Rate Monitor	D	N.A.	R	N.A.	*

6.(GGNS-697)

TABLE 4.3.7.12-1 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	SOURCE CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
~~6. OFFGAS PRE-TREATMENT MONITOR~~					
a. Noble Gas Activity Monitor	D	M#	R(3)##	Q(2)	***
7. OFFGAS POST-TREATMENT MONITOR					
a. Noble Gas Activity Monitor Providing Alarm and Automatic Termination of Release	D	M	R(3)##	Q(2)	***

Add 3.3.5.1

This change was previously requested in PCOL 83/05 dated April 7, 1983.

6.(GGNS-697)

6.(GGNS-697)

TABLE 4.3.7.12-1 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING
INSTRUMENTATION SURVEILLANCE REQUIREMENTS

TABLE NOTATION

* At all times.

** During main condenser offgas treatment system operation.

~~*** During operation of the main condenser air ejector.~~

SOURCE CHECK may be deferred to the next shutdown of greater than 8 hours duration if unable to be performed at the monthly interval due to inaccessibility because of being in a high radiation area.

The sensor will be calibrated for mr/hr from the calibration standard. The conversion to release rate will be performed during subsequent unit operation, but within one week.

(1) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if any of the following conditions exists:

1. Instrument indicates measured levels above the alarm/trip setpoint.
2. Circuit failure.
3. Instrument indicates a downscale failure.
4. ~~Instrument controls not set in operate mode.~~

(2) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annuciation occurs if any of the following conditions exists:

1. Instrument indicates measured levels above the alarm setpoint.
2. Circuit failure.
3. Instrument indicates a downscale failure.
4. Instrument controls not set in operate mode.

(3) The initial CHANNEL CALIBRATION shall be performed using one or more of the reference standards certified by the National Bureau of Standards (NBS) or using standards that have been obtained from suppliers that participate in measurement assurance activities with NBS. These standards shall permit calibrating the system over its intended measurement range. For subsequent CHANNEL CALIBRATION, sources that have been related to the initial calibration shall be used.

(4) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

1. One volume percent hydrogen, balance nitrogen, and
2. Four volume percent hydrogen, balance nitrogen.

6.(GGNS-697)

RADIOACTIVE EFFLUENTS

MAIN CONDENSER

LIMITING CONDITION FOR OPERATION

3.11.2.7 The gross radioactivity (gamma) rate of the noble gases Xe-135m, Xe-133, Xe-135, Xe-138, Kr-85m, Kr-87, Kr-88 measured at the off-gas recombiner effluent shall be limited to less than or equal to 380 millicuries/second.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3

ACTION:

With the gross radioactivity rate of the noble gases Xe-135m, Xe-133, Xe-135, Xe-138, Kr-85, Kr-87, and Kr-88 at the off-gas recombiner effluent exceeding 380 millcuries/second, restore the gross radioactivity release rate to within its limit within 72 hours or be in at least HOT STANDBY within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.11.2.7.1 The radioactivity release rate of noble gases near the outlet of the main condenser air ejector shall be continuously monitored in accordance with Specification ~~3.3.7.12~~ 3.3.7.1.

4.11.2.7.2 The gross radoactivity release rate of the noble gases Xe-135m, Xe-133, Xe-135, Xe-138, Kr-85m, Kr-87, and Kr-88 from the main condenser air ejector shall be determined to be within the limits of Specification 3.11.2.7 at the following frequencies by performing an isotopic analysis of a representative sample of gases taken at the discharge (prior to dilution and/or discharge) of the main condenser air ejector:

a. At least once per 31 days.

b. Within 4 hours following an increase, as indicated by the Condenser Air Ejector Noble Gas Activity Monitor, of greater than 50%, after factoring out increases due to changes in THERMAL POWER level, in the nominal steady state fission gas release from the primary coolant.

7. (GGNS - 751)

SUBJECT: Table 3.8.4.1-1, pages 3/4 8-21 through 3/4 8-38.

DISCUSSION: The proposed changes to Table 3.8.4.1-1 include the following:

1. Adding the type of breaker (GE power vac) to the 6.9 KV circuit breaker list and correcting the response time from "(cycles)" to "(seconds)" and from "60" to "1.0".

2. Clarifying that 6.9 KV breakers 252-1103B and 252-1103C are both associated with Reactor Recirc Pump (B33C001A) and that breakers 252-1205B and 252-1205C are both associated with Reactor Recirc Pump (B33C001B). The dash "-" between the alpha and numeric parts of the breaker numbers is removed to be consistent with plant drawings.

3. The 480 VAC circuit breakers under Section b should be listed as "480 VAC Circuit Breakers" instead of "480 VAC Molded Case Circuit Breakers".

4. Subheading under Section b in the table should be changed from "Stored Energy Type SS3G3" to "Stored Energy Type K600S with SS3G3 Tripping Device."

5. Under Section b add 480 VAC circuit breaker 52-15205 for Hydrogen Recombiner (Q1E61C003A-A).

6. Pages 3/4 8-22 through 3/4 8-37 should be reheaded subsection c to read:
   "c.480 VAC Circuit Breakers
   Molded Case Type, NZM".

7. On Pages 3/4 8-22 and 3/4 8-26 "#" symbol in System/ Component Affected for breakers 52-1112-07, 52-1112-10, and 52-1251-26 is not intended as a superscript for the lighting transformers and should be deleted.

8. On page 3/4 8-23, add 480 VAC circuit breaker 52-1112-41 for the Reactor Recirculation Sample Panel Isolation MOV (N1B33F129).

9. On page 3/4 8-26 change description of SYSTEM/COMPONENT AFFECTED for breaker 52-1251-22 to "MOV - RWCU to FLT "S" Isol Vlv. (N1G33F255-N)".

10. On page 3/4 8-31 change SYSTEM/COMPONENT AFFECTED for breaker 52-1542-23 to "REFUELING PLATFORM ASSY (Q1F15E003-A)". Add breaker 52-1542-26 for Drywell Recirc Fan (N1M51C001-A).

11. On page 3/4 8-34 add breaker 52-1631-15 for MOV-SSW to RHR System (Q1E12-F096B).

12. On page 3/4 8-37 add breaker 52-1642-29 for DRWL Recirc Fan (N1M51C002B).

13. On page 3/4 8-38 delete the listing of fuses for the 480 VAC breakers listed under "3". These breakers are listed on page 3/4 8-21 correctly as 480 VAC Circuit Breakers of the Stored Energy Type K600S with SS3G3 Tripping Device. The listing of fuses in Table 3.8.4.1-1 is not necessary and does not follow the guidelines set forth in the General Electric Standard Technical Specifications.

JUSTIFICATION: The changes to Table 3.8.4.1-1 corrects terminology and adds breakers which should be part of the table. The changes to the response time of the 6.9 KV Circuit Breakers make them consistent with the rest of the breakers in the table. The listing of fuse type for breakers on page 3/4 8-38 serves no useful purpose and should be deleted. The GE Standard Technical Specifications does not have this listing.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed changes to Table 3.8.4.1-1 consists of correction of errors, changes in nomenclature and the addition of circuit breakers not previously identified. These changes to the table are purely administrative in nature.

These changes do not involve the reduction of safety margins and no significant increase in the probability or consequences of an accident previously evaluated is involved nor is the possibility of a new or different kind of accident from any accident previously evaluated created. Thus the proposed change to the Technical Specification does not involve any significant hazards considerations.

NOTE: Technical Specification page changes marked with a PCOL number and circled are changes that were previously submitted to the NRC.

7. (GGNS-751)

Reactor Recirc. Pump (B33C001A)
Reactor Recirc. Pump (B33C001A)
Reactor Recirc. Pump (B33C001B)
Reactor Recirc. Pump (B33C001B)

TABLE 3.8.4.1-1

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

DEVICE NUMBER AND LOCATION	TRIP SETPOINT (Amperes)	RESPONSE TIME, Seconds (~~Cycles~~)	SYSTEM/ COMPONENT AFFECTED
a. 6.9 kV Circuit Breakers			
GE Power Vac Type:			
252-1103 B (1103)	7200/45 ~~5400/40/± 10%~~ #	1.0 ~~60~~	~~Reactor Recir. Pump Pump B33C001A~~
252-~~1003~~ C	7200/45 ~~5400/40/± 10%~~ #	1.0 ~~60~~	
252-1205 B	7200/45 ~~5400/40/± 10%~~ #	1.0 ~~60~~	~~Reactor Recir. Pump Pump B33C001B~~
252-1205 C	7200/45 ~~5400/40/± 10%~~ #	1.0 ~~60~~	
b. 480 VAC ~~Molded Case~~ Circuit Breakers			
1. Stored Energy Type ~~SS3G3~~ K600S with SS3G3 Tripping Device			
52-12202	1200	0.05	CONTAINMENT COOLING FILTER TRAIN HEATERS (N1M41D002B-N)
52-12209	2000	0.05	CNTMT POLAR CRANE (Q1F13E001-N)
51-11502	1200	0.05	CNTMT CLG. FILTER TRAIN HEATER (N1M41D002A-N)
52-15105	2000	0.05	DRYWELL PURGE COMPRESS. (Q1E61C001A-A)
52-16204	2000	0.05	DRYWELL PURGE COMPRESS. (Q1E61C001B-B)
52-15205	1200	0.05	HYDROGEN RECOMBINER (Q1E61C003A-A)
52-16404	1200	0.05	HYDROGEN RECOMBINER (Q1E61C003B-B)

(TROL 83/103 257)

Primary current/setpoint.

7.(GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

C. 480 VAC ~~Molded Case~~ Circuit Breakers ~~(Continued)~~
Molded Case
2. A Type, NZM

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1112-01	500	0.100	NEUTRON MON SYS DRIVE MECHANISM (1C51-J001A)
52-1112-02	500	0.100	NEUTRON MON SYS DRIVE MECHANISM (1C51-J001B)
52-1112-03	500	0.100	NEUTRON MON SYS DRIVE MECHANISM (1C51-J001C)
52-1112-04	500	0.100	NEUTRON MON SYS DRIVE MECHANISM (1C51-J001D)
52-1112-05	175	0.100	STEAM TUNNEL CLR INSIDE CTMT FAN (N1M41C004A-N)
52-1112-06	500	0.100	NEUTRON MON SYS DRIVE MECHANISM (1C51-J001E)
52-1112-07	1200	0.100	LIGHTING XFMR# 1X105 (N1R18S105-D)
52-1112-10	1200	0.100	LIGHTING XFRM# 1X109 (N1R18S109-D)
52-1112-15	320	0.100	RWCU BACKWASH TRANSFER PUMP (N1G36C004-N)
52-1112-18	24	0.100	PRECOAT TANK AGITATOR (N1G36D019-N)
52-1112-20	90	0.100	RWCU FILTER DEMIN HOLDING PUMP (N1G36C001A-N)

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1112-21	800	0.100	480 V RECEPTACLE
52-1112-22	5	0.100	MOV-STM TUNNEL COOLER INLET (N1P44F105A-N)
52-1112-24	32	0.100	MOV CLEANUP LINE RECIRC LOOP A (Q1G33F100-N)
52-1112-27	24	0.100	RESIN TANK AGITATOR (N1G36D020-N)
52-1112-28	38	0.100	MOV RWCU HEAT EXCHANGER BYPASS (N1G33F104-N)
52-1112-31	38	0.100	MOV RWCU HEAT EXCHANGER BYPASS (N1G33F044-N)
52-1112-36	500	0.100	REAC. RECIRC. PUMP SPACE HEATER (TB1B33C001A)
52-1112-37	800	0.100	480 V RECEPTACLE
52-1112-41	6	0.100	Reactor Recirc. Sample Panel Isol. MOV (N1B33F129)
52-1113-07	125	0.100	CNTMT FLOOR DRAIN SUMP PUMP (N1P45C019B-N)
52-1113-21	60	0.100	DRYWELL EQUIP DRAIN SUMP PUMP (N1P45C002B-N)
52-1113-30	28	0.100	MOV RWCU HX OUTL ISOL VLV (N1G33F254-N)
52-1113-44	800	0.100	480 V RECEPTACLE

7.(GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1113-47	500	0.100	SPARE
52-1151-06	240	0.100	CNTMT COOLING FILTER TRAIN FAN (N1M41D002A-N)
52-1151-07	17.5	0.100	REAC. RECIRC. HPU OIL PUMP FAN (N1B33D003A3-N)
52-1151-10	600	0.100	REAC. RECIRC. HPU OIL PUMP (N1B33D003A1-N)
52-1151-12	75	0.100	MOV - RECIRC PUMP SUCTION (Q1B33F023A-N)
52-1151-19	75	0.100	MOV RECIRC PUMP DISCHARGE (Q1B33F067A-N)
52-1151-20	600	0.100	REAC. RECIRC. HPU OIL PUMP (N1B33D003A2-N)
52-1151-21	17.5	0.100	REAC. RECIRC. HPU OIL PUMP FAN (N1B33D003A4-N)
52-1151-22	60	0.100	DRYWELL CHEMICAL WASTE SUMP PUMP (N1P45C029-N)
52-1151-27	60	0.100	DRYWELL EQPT. DR. SUMP PUMP (N1P45C002A-N)
52-1151-28	125	0.100	CNTMT FLOOR DR. SUMP PUMP (N1P45C019A-N)

7.(GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
^Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1222-04	800	0.100	CNTMT CLR FAN COIL UNIT FAN (N1M41B001B-N)
52-1222-05	240	0.100	CNTMT COOLING SYS CHAR TRAIN FAN (N1M41D002B-N)
52-1222-09	1200	0.100	LIGHTING XFMR # 1X104 (N1R18S204-E)
52-1222-11	800	0.100	480 V RECEPTACLES
52-1222-18	500	0.100	REAC. RECIRC. PUMP SPACE HEATER (TB1B33C001B)
52-1222-19	75	0.100	MOV - RWCU RETURN TO REACTOR (N1G33F042-N)
52-1222-20	32	0.100	MOV - VESSEL DRAIN LINE RECIRC. (Q1G33F101-N)
52-1222-21	75	0.100	MOV - CLEANUP LINE SUCT. IN DRYWELL (Q1G33F102-N)
52-1222-22	32	0.100	MOV - CLEANUP LINE RECIRC LOOP B (Q1G33F106-N)
52-1251-01	175	0.100	STEAM TUNNEL CLR INSIDE CNTMT (N1M41C004B-N)
52-1251-07	60	0.100	CNTMT CHEM WASTE SUMP PUMP (N1P45C027A-N)

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

MOLDED CASE
A Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1251-13	800	0.100	CNTMT CLR FAN COIL UNIT FAN (N1M41B001C-N)
52-1251-15	32	0.100	MOV - RWCS HX INL ISOL VLV (N1G33F256-N)
52-1251-18	38	0.100	MOV - REGEN HEAT EXCHANGER BYPASS (Q1G33F107-N)
52-1251-19	38	0.100	MOV - RWCU DRAIN FLOW ORIFICE BYP (N1G33F031-N)
52-1251-20	320	0.100	CNTMT EQUIP DRAIN PUMP (N1P45C004B-N)
52-1251-22	32	0.100	MOV - RWCU ~~HX BYPASS LINE~~ TO FLT "S" ISOL VLV (N1G33F255-N)
52-1251-26	1200	0.100	LIGHTING XFMR 1X112 (N1R18S112-D)
52-1251-28	5	0.100	MOV - STM TUNNEL COOLER INLET (N1P44F105B-N)
52-1252-23	60	0.100	DRYWELL FLOOR DRAIN SUMP PUMP (N1P45C001B-N)
52-1411-01	38	0.100	MOV - VESSEL HEAD VENTILATION (Q1B21F002-N)

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1412-01	17.5	0.100	REAC RECIRC HPU OIL PUMP FAN (N1B33D003B3-N)
52-1412-02	60	0.100	CNTMT CHEM WASTE SUMP PUMP (N1P45C027B-N)
52-1412-03	60	0.100	DRYWELL FLOOR DRAIN SUMP PUMP (N1P45C001A-N)
52-1412-05	12.5	0.100	MOV CRD COOLWTR PRESS CONTROL (N1C11F003-N)
52-1412-08	105	0.100	MOV REAC RECIRC PUMP B SUCTION (Q1B33F023B-N)
52-1412-09	175	0.100	RWCU DEMIN PRECOAT PUMP (N1G36C002-N)
52-1412-12	90	0.100	RWCU DEMIN HOLDING PUMP (N1G36C001B-N)
52-1412-15	600	0.100	REAC RECIRC HPU OIL PUMP (N1B33D003B1-N)
52-1412-17	320	0.100	CNTMT EQUIP DRAIN SUMP PUMP (N1P45C004A-N)
52-1412-20	800	0.100	480 V RECEPTACLE
52-1412-23	600	0.100	REAC RECIRC HPU OIL PUMP (N1B33D003B2-N)

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
^Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1412-25	17.5	0.100	REAC RECIRC HPU OIL PUMP FAN (N1B33D003B4-N)
52-1412-26	38	0.100	MOV REACTOR VESSEL HEAT VENT (Q1B21F001-N)
52-1412-28	38	0.100	MOV REACTOR VESSEL HEAT VENT (Q1B21F005-N)
52-1412-32	800	0.100	CNTMT CLR FAN COIL UNIT FAN (N1M41B001A-N)
52-1412-33	105	0.100	MOV - REAC RECIRC PUMP A DISCHARGE (Q1B33F067B-N)
52-1412-35	500	0.100	CRD REMOVAL HOIST (N1M31E003-N)
52-1412-39	1200	0.100	DRYWELL VALVE HOIST (Q1M31E002-N)
52-1412-41	32	0.100	CNTMT AIRLOCK AIR SHOWER FAN (N1M41C005-N)
52-1511-07	50	0.100	MOV - RWCS INL INB ISOL VLV (Q1G33F250-A)
52-1511-24	50	0.100	MOV - RWSC OUT INB ISOL VLV (Q1G33F252-A)
52-1511-44	12.5	0.100	MOV - DRYWELL CLG WATER ISOL (Q1P42F116-A)

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
^Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1511-54	24	0.100	Spare
52-1521-02	6	0.100	MOV COMBUSTIBLE GAS CONTROL SYS (Q1E61F003A-A)
52-1521-03	6	0.100	MOV COMBUSTIBLE GAS CONTROL SYS (Q1E61F005A-A)
52-1521-07	10	0.100	MOV - SUPPR. POOL MAKE-UP VALVE (Q1E30F002A-A)
52-1521-14	600	0.100	SLC SYSTEM PUMP (Q1C41C001A-A)
52-1521-15	5	0.100	STORAGE TANK OUTLET VALVE (Q1C41F001A-A)
52-1521-28	12.5	0.100	MOV - INST LINE ISOL VALVE (Q1M71F595-A)
52-1521-44	10	0.100	MOV - SUPPR POOL MAKE-UP VALVE (Q1E30F001A-A)
52-1531-24	12.5	0.100	MOV - DRYWELL COOLER ISOLATION (Q1P44F076-A)
52-1531-25	8	0.100	MOV - REACTOR WATER SAMPLE (Q1B33F020-A)

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1531-36	320	0.100	MOV - LPCI A INJECTION ISOL (Q1E12F042A-A)
52-1531-44	125	0.100	MOV - RHR A UPPER CNT POOL SPRAY (Q1E12F037A-A)
52-1531-49	32	0.100	MOV - DRYWELL CHEM WASTE ISOL (Q1P45F056-A)
52-1531-50	105	0.100	MOV - RHR A CONTAINMENT SPRAY (Q1E12F028A-A)
52-1541-32	32	0.100	MOV - COMB GAS CONT COMP A OUT (Q1P41F168A-A)
52-1542-05	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B001A-A)
52-1542-06	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M5B002A-A)
52-1542-07	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B003A-A)
52-1542-08	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B004A-A)
52-1542-09	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B005A-A)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
^Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1542-10	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B006A-A)
52-1542-14	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F055-A)
52-1542-15	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F057-A)
52-1542-16	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F059-A)
52-1542-17	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F061-A)
52-1542-18	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F063-A)
52-1542-19	5	0.100	MOV - DRYWELL COOLER INLET (N1P44F065-A)
52-1542-21	800	0.100	SLCS OPERATING HEATER (N1C41D002)
52-1542-22	24	0.100	DRWL PURGE COMP AUX OIL PUMP (Q1E61C001A-A)
52-1542-23	500	0.100	REFUELING PLATFORM ASSY ~~(N1R16S513-A)~~ (Q1F15E003-A)
52-1542-26	175	0.100	DRYWELL RECIRC FAN (N1M51C001-A)
52-1542-29	1200	0.100	STBY LIQ CONTROL SYS MIXING HEATER (Q1C41D003)

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1611-10	12.5	0.100	MOV - DRYWELL COLL TK OUTLET ISOLATION (Q1G41F044-B)
52-1611-15	12.5	0.100	MOV - PSW CTMT STM TNL CLR ISOL (Q1P44F070-B)
52-1611-25	12.5	0.100	MOV - DRYWELL CLG WTR ISOL (Q1P42F117-B)
52-1611-31	12.5	0.100	MOV - DRYWELL CLG WTR INL ISOL (Q1P42F114-B)
52-1611-32	32	0.100	MOV - CTMT CLG WTR ISOLATION (Q1P42F068-B)
52-1611-42	12.5	0.100	MOV PSW STEAM TUNNEL CLR ISOL (Q1P44F074-B)
52-1611-43	12.5	0.100	MOV PSW STEAM TUNNEL CLR ISOL (Q1P44F077-B)
52-1611-44	38	0.100	MOV - SERVICE AIR DRYWELL ISOLATION (Q1P52F195-B)
52-1621-03	7	0.100	MOV - DRWL HYDR INST LINE ISO (Q1E61F595B-B)
52-1621-04	7	0.100	MOV - DRWL HYDR INST LINE ISO (Q1E61F597B-B)

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1621-05	7	0.100	MOV - DRWL HYDR INST LINE ISO (Q1E61F595D-B)
52-1621-06	7	0.100	MOV - DRWL HYDR INST LINE ISO (Q1E61F597D-B)
52-1621-07	7	0.100	MOV CTMT HYDR INST LINE ISOL (Q1E61F596B-B)
52-1621-08	7	0.100	MOV CTMT HYDR INST LINE ISOL (Q1E61F598B-B)
52-1621-09	7	0.100	MOV CTMT HYDR INST LINE ISO (Q1E61F596D-B)
52-1621-10	7	0.100	MOV CTMT HYDR INST LINE ISO (Q1E61F598D-B)
52-1621-16	10	0.100	CONTAINMENT ISOL VALVE (Q1B33F128-B)
52-1621-17	6	0.100	MOV - DRWL PURGE INLET (Q1E61F003B-B)
52-1621-18	6	0.100	MOV - DRWL PURGE VACUUM RELIEF (Q1E61F005B-B)
52-1621-19	24	0.100	SPARE

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
^Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1621-40	32	0.100	MOV - COMB GAS CONT COMP B OUT (Q1P41F168B-B)
52-1631-06	125	0.100	MOV - RHR B UPPER CTMT POOL SPRAY (Q1E12F037B-B)
52-1631-13	320	0.100	MOV - RHR B LPCS (Q1E12F042B-B)
52-1631-15	105	0.100	MOV-SSW TO RHR SYSTEM (Q1E12-F096B)
52-1631-20	12.5	0.100	MOV - MAIN STEAM LINE DRAIN INBD (Q1B21F016-B)
52-1631-29	600	0.100	STANDBY LIQUID CONTROL PUMP (Q1C41C001B-B)
52-1631-33	105	0.100	MOV - RHR B TO CONTAINMENT SPRAY (Q1E12F028B-B)
52-1631-34	105	0.100	MOV RCIC STEAM SUPPLY LINE ISOL (Q1E51F063-B)
52-1631-35	5	0.100	STORAGE TANK OUTLET VALVE (Q1C41F001B-B)
52-1631-37	240	0.100	MOV - RHR A SHT DN CLG INBD ISO (Q1E12F009-B)
52-1631-38	32	0.100	MOV - RCIC STEAM WARMUP LINE ISOL (Q1E51F076-B)

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
^Type NZH (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1631-41	8	0.100	MOV - REACTOR WATER SAMPLE (Q1B33F019-B)
52-1631-47	50	0.100	MOV - INST AIR DRWL OUTBD ISOL (Q1P53F007-B)
52-1631-50	32	0.100	MOV - RWCU OUTLET TO MAIN CONDENSER (Q1G33F028-B)
52-1631-51	32	0.100	MOV RWCU SYS ISOLATIN VALVE (Q1G33F053-B)
52-1631-52	50	0.100	MOV - RWCU SYS ISOLATION (Q1G33F040-B)
52-1631-53	50	0.100	MOV - RWCU SYS ISOLATION (Q1G33F001-B)
52-1641-06	32	0.100	MOV - MAKE UP WATER CNTMT ISOL (Q1P21F018-B)
52-1641-07	50	0.100	MOV - RWCS INL OUT ISOL VLV (Q1G33F251-B)
52-1641-08	50	0.100	MOV - RWCS INL OUT ISOL VLV (Q1G33F253-B)
52-1641-16	7	0.100	MOV INSTRUMENT LINE INBOARD ISO (Q1D23F591-B)

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
^Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1641-18	7	0.100	MOV - INSTRUMENT LINE INBOARD ISO (Q1D23F593-B)
52-1641-24	7	0.100	CONTAINMENT ISOL VALVE (Q1B33F126-B)
52-1641-26	32	0.100	MOV - DRYWELL CHEM WASTE ISOL (Q1P45F097-B)
52-1641-35	10	0.100	MOV - SUPPR POOL MAKE UP VALVE (Q1E30F001B-B)
52-1641-36	10	0.100	MOV - SUPPR POOL MAKE UP VALVE (Q1E30F002B-B)
52-1642-05	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B001B-B)
52-1642-06	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B002B-B)
52-1642-07	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B003B-B)
52-1642-08	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B004B-B)
52-1642-09	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B005B-B)

7.(GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC ~~Molded Case~~ Circuit Breakers (Continued)

Molded Case
^Type NZM (Continued)

BREAKER NUMBER	TRIP SETPOINT (Amperes)	RESPONSE TIME (Seconds)	SYSTEM/COMPONENT AFFECTED
52-1642-10	320	0.100	DRYWELL COOLER FAN COIL UNIT (N1M51B006B-B)
52-1642-14	12.5	0.100	MOV - DRYWELL COOLER INLET (N1P44F056-B)
52-1642-15	12.5	0.100	MOV - DRYWELL COOLER INLET (N1P44F058-B)
52-1642-16	12.5	0.100	MOV - DRYWELL COOLER INLET (N1P44F060-B)
52-1642-17	12.5	0.100	MOV - DRYWELL COOLER INLET (N1P44F062-B)
52-1642-18	12.5	0.100	MOV - DRYWELL COOLER INLET (N1P44F064-B)
52-1642-19	12.5	0.100	MOV - DRYWELL COOLER INLET (N1P44F066-B)
52-1642-21	24	0.100	DRWL PURGE COMP AUX OIL PUMP (Q1E61C001B-B)
52-1642-29	175	0.100	DRWL RECIRC. FAN (N1M51C002B)

7. (GGNS-751)

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

480 VAC Molded Case Circuit Breakers (Continued)

3. Type MSCP

BREAKER NUMBER	FUSE TYPE	SYSTEM/COMPONENT AFFECTED
52-12202	MSCP-W	CONTAINMENT COOLING FILTER TRAIN HEATER (N1M41D002B-N)
52-12209	MSCP-Y	CONTAINMENT POLAR CRANE (Q1F13E001-N)
52-11502	MSCP-W	CONTAINMENT CLG FILTER TRAIN HEATER (N1M41D002A-N)
52-15105	MSCP-Y	DRYWELL PURGE COMPRESSOR (Q1E61C001A-A)
52-16204	MSCP-Y	DRYWELL PURGE COMPRESSOR (Q1E61C001B-B)
52-16404	MSCP-W	HYDROGEN RECOMBINER (Q1E61C003B-B)

8. (GGNS - 656)

SUBJECT: Technical Specification Surveillance Requirement 4.5.1.b, page 3/4 5-4.

DISCUSSION: Present Surveillance Requirement 4.5.1.b requires testing the LPCS, LPCI, and HPCS pumps pursuant to ASME Section XI requirements to meet the following:

	Flow (gpm)	Test Line Pressure (psid)
LPCS pump	at least 7115	greater than or equal to 128
LPCI pumps		
A,B,&C	at least 7450	greater than or equal to 24
HPCS pump	at least 7115	greater than or equal to 200

The present test line pressure values for the above listed pumps are incorrect and do not reflect test line pressure requirements but represent design differential pressures between the reactor pressure vessel and the suction water source for each pump. Since ASME Section XI pump testing is based on meeting total developed pump head criteria at a certain flow rate, the proposed change to Surveillance Requirement 4.5.1.b is to add total developed pump head values instead of the present, incorrect Test Line Pressure values. The proposed values are as follows:

	Flow (gpm)	Total Developed Head (psid)
LPCS pump	at least 7115	greater than or equal to 261
LPCI pumps		
A,B,&C	at least 7450	greater than or equal to 89
HPCS pump	at least 7115	greater than or equal to 182

JUSTIFICATION: The present test line pressure values stated in Surveillance Requirement 4.5.1.b for the LPCS, LPCI, and HPCS pumps are incorrect. The present values represent design differential pressures between the reactor pressure vessel and the suction water source for each pump and do not reflect ASME Section XI testing criteria. ASME Section XI pump tests are performed to verify pump flow and total developed head. The proposed change to Surveillance Requirement 4.5.1.b is made to conform to ASME Section XI pump testing requirements. The total developed pump head values for LPCS, LPCI, and HPCS are taken from vendor manual pump curves and represent total developed head at maximum pump flow. For LPCS, maximum flow is 8900 gpm with a total developed head of 261 psid. For LPCI, maximum flow is 8200 gpm with a total developed head of 89 psid. For HPCS, maximum pump flow is 8000 gpm with a total developed head of 182 psid. By using the total developed head values at maximum flow for each pump, testing flexibility is added and testing can be performed anywhere between the flow values presently stated in 4.5.1.b and maximum pump flow.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change corrects a previous error and provides testing criteria that reflects ASME Section XI requirements. The present values for test line pressures in Surveillance Requirement 4.5.1.b represent design differential pressures between the reactor pressure vessel and the suction water source for each pump. The present values do not represent testable test line pressure values nor do they reflect Section XI pump testing criteria. The proposed change does reflect Section XI pump testing requirements and does provide testing criteria that can be verified. The total developed pump head values are taken at pump maximum flow to allow testing flexibility over a flow range (from flow specified in 4.5.1.b to maximum pump flow). This change does not introduce a significant reduction in a margin of safety and does not involve a significant increase in the probability or consequences of an accident previously evaluated nor does it create the possibility of a new or different kind of accident from any accident previously evaluated. Therefore, this changes does not involve any significant hazards consideration.

8.(GGNS-656)

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS

4.5.1 ECCS division 1, 2 and 3 shall be demonstrated OPERABLE by:

a. At least once per 31 days for the LPCS, LPCI and HPCS systems:

1. Verifying by venting at the high point vents that the system piping from the pump discharge valve to the system isolation valve is filled with water.

2. Performance of a CHANNEL FUNCTIONAL TEST of the:

a) Discharge line "keep filled" pressure alarm instrumentation, and

b) Header delta P instrumentation.

3. Verifying that each valve, manual, power operated or automatic, in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.

b. Verifying that, when tested pursuant to Specification 4.0.5, each:

1. LPCS pump develops a flow of at least 7115 gpm ~~against a test line pressure~~ with a total developed head of greater than or equal to ~~120~~ 261 psid.

2. LPCI pump develops a flow of at least 7450 gpm ~~against a test line pressure~~ with a total developed head of greater than or equal to ~~94~~ 89 psid.

3. HPCS pump develops a flow of at least 7115 gpm ~~against a test line pressure~~ with a total developed head of greater than or equal to ~~200~~ 182 psid.

c. For the LPCS, LPCI and HPCS systems, at least once per 18 months:

1. Performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence and verifying that each automatic valve in the flow path actuates to its correct position. Actual injection of coolant into the reactor vessel may be excluded from this test.

2. Performing a CHANNEL CALIBRATION of the:

a) Discharge line "keep filled" pressure alarm instrumentation and verifying the:

1) High pressure setpoint of the:

(a) LPCS system to be 580 + 20, - 0 psig.

(b) LPCI subsystems to be 480 + 20, - 0 psig.

9. (GGNS - 852)

SUBJECT: Technical Specification 4.6.3.1.c, page 3/4 6-22; 3.6.3.1 (Actions c and d), page 3/4 6-21; and 4.5.3.1.b, page 3/4 5-9.

DISCUSSION: Present Specifications 4.6.3.1.c and 4.5.3.1.b require 2 channels per division for suppression pool water level instrumentation surveillance requirements. The proposed change is to 1 channel per division. The action statements of 3.6.3.1 have been changed to reflect "1 channel per division" design, and to be consistent with the action statements in 3.5.3.1.

JUSTIFICATION. Surveillance Requirements 4.6.3.1.c and 4.5.3.1.b, and Specificiation 3.6.3.1 involve the suppression pool water level alarm instrumentation and testing requirements thereof. Grand Gulf design only requires one instrument per channel and one channel per division for this alarm function. This change reflects "as built" plant design and corrects a previous error in the Technical Specifications.

SIGNIFICANT HAZARDS CONSIDERATION:

This change constitutes correction of a previous error in the Technical Specifications and reflects "as built" plant design. The alarm function for suppression pool water level only requires 1 channel per division in the Grand Gulf design. This change is not considered to involve a significant reduction in a margin of safety and does not involve a significant increase in the probability or consequences of an accident previously evaluated nor is the possibility of a new or different kind of accident from any accident previously evaluated created. Therefore, this change to the Technical Specifications does not involve any significant hazards considerations.

9. (GGNS-852)

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

c. With one suppression pool water level instrumentation division inoperable, restore the inoperable division to OPERABLE status within 7 days or verify the suppression pool water level to be greater than or equal to 18'4-3/4" or 12'8", as applicable, at least once per 12 hours by an alternate indicator.

d. With both suppression pool water level instrumentation divisions inoperable, restore at least one inoperable division to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours and verify the suppression pool water level to be greater than or equal to 18'4-3/4" or 12'8", as applicable, at least once per 12 hours by at least one alternate indicator.

SURVEILLANCE REQUIREMENTS

4.5.3.1 The suppression pool shall be determined OPERABLE by verifying:

a. The water level to be greater than or equal to, as applicable:

1. 18'4-3/4" at least once per 24 hours.

2. 12'5" at least once per 12 hours.

b. Two suppression pool water level instrumentation divisions, with ~~2~~ 1 channels per division, OPERABLE with the low water level alarm setpoint $\geq$ 18'5½" or 12'8", as applicable, by performance of a:

1. CHANNEL CHECK at least once per 24 hours,

2. CHANNEL FUNCTIONAL TEST at least once per 31 days, and

3. CHANNEL CALIBRATION at least once per 18 months.

4.5.3.2 With the suppression pool level less than the above limit or drained in OPERATIONAL CONDITION 4 or 5*, at least once per 12 hours:

a. Verify the required conditions of Specification 3.5.3.b to be satisfied, or

b. Verify footnote conditions * to be satisfied.

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

c. With one ~~channel in any~~ suppression pool water level instrumentation division inoperable and/or with one suppression pool water temperature instrumentation channel in any pair(s) of temperature instrumentation channels in the same sector inoperable, restore the inoperable channel(s) to OPERABLE status within 7 days or verify suppression pool water level and/or temperature to be within the limits at least once per 12 hours.

d. With both ~~channels in any~~ suppression pool water level instrumentation divisions inoperable and/or with both suppression pool water temperature instrumentation channels in any pair(s) of temperature instrumentation channels in the same sector inoperable, restore at least one inoperable water level ~~in each~~ division and at least one inoperable water temperature instrumentation channel in each pair of temperature instrumentation channels in the same sector to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.3.1 The suppression pool shall be demonstrated OPERABLE:

a. By verifying the suppression pool water volume to be within the limits at least once per 24 hours.

b. At least once per 24 hours in OPERATIONAL CONDITION 1 or 2 by verifying the suppression pool average water temperature to be less than or equal to 95°F, except:

1. At least once per 5 minutes during testing which adds heat to the suppression pool, by verifying the suppression pool average water temperature less than or equal to 105°F.

2. At least once per hour when suppression pool average water temperature is greater than or equal to 95°F, by verifying suppression pool average water temperature to be less than or equal to 110°F and THERMAL POWER less than or equal to 1% of RATED THERMAL POWER.

3. At least once per 30 minutes following a scram with suppression pool average water temperature greater than or equal to 95°F, by verifying suppression pool average water temperature less than or equal to 120°F.

9.(GGNS-852)

SURVEILLANCE REQUIREMENTS (Continued

c. By verifying two suppression pool water level instrumentation divisions, with ~~2~~ 1 channels per division, and at least twelve suppression pool water temperature instrumentation channels, at least two channels in each suppression pool sector shown below in Table 4.6.3.1-1, OPERABLE by performance of a: e

1. CHANNEL CHECK at least once per 24 hours,

2. CHANNEL FUNCTIONAL TEST at least once per 31 days, and

3. CHANNEL CALIBRATION at least once per 18 months,

with the water level and temperature alarm setpoint for:

1. High water level $\leq$ 18'9",

2. Low water level $\geq$ 18'5-1/2", and

3. High water temperature $\leq$ 90°F.

10. (GGNS - 867)

SUBJECT: Technical Specification Surveillance Requirement 4.1.3.1.4.a, page 3/4 1-5.

DISCUSSION: Present Technical Specification Surveillance Requirement 4.1.3.1.4.a requires the scram discharge volume drain and vent valves to be verified to open (at least once per 18 months) when the scram signal is reset and when the trip signal is bypassed. The proposed change deletes the requirements for verifying the scram discharge volume drain and vent valves open when the trip signal is bypassed as a separate test requirement.

JUSTIFICATION: The present Technical Specification has two separate requirements for verifying the opening of the scram discharge volume drain and vent valves. The valves will not open unless both the trip signal is bypassed and the scram signal is reset. Testing the opening of the valves can only be accomplished if both of the above conditions are met. Since the scram signal cannot be reset unless the trip signal (from scram discharge volume) is also bypassed, then the requirement for trip signal to be bypassed is already included in the scram signal reset part of the test. The Standard Technical Specification does not include the "trip signal is bypassed" as a separate test for opening the scram discharge volume drain and vent valves. The above stated reasons are justification for removing the "trip signal is bypassed" as a separate test of the opening of the scram discharge volume drain and vent valves.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change deletes a test requirement that cannot be accomplished as a separate item. However, this deleted requirement is included in the part of the test that tests opening of the valves when the "scram signal is reset" since the trip signal must be bypassed before the scram signal can be reset. Also, this change is in compliance with wording in the Standard Technical Specification. This change is not considered to involve a significant reduction in a margin of safety and does not increase the probability or consequences of an accident previously evaluated nor is the possibility of a new or different kind of accident from any accident previously evaluated created. Therefore, this change to the Technical Specifications does not involve any significant hazards considerations.

10. (GGNS-867)

SURVEILLANCE REQUIREMENTS (Continued)

4.1.3.1.4 The scram discharge volume shall be determined OPERABLE by demonstrating:

a. The scram discharge volume drain and vent valves OPERABLE, when control rods are scram tested from a normal control rod configuration of less than or equal to 50% ROD DENSITY at least once per 18 months, by verifying that the drain and vent valves:

1. Close within 30 seconds after receipt of a signal for control rods to scram, and

2. Open when the:

~~a)~~ Scram signal is reset.

~~b) Trip signal is bypassed.~~

b. Proper level sensor response by performance of a CHANNEL FUNCTIONAL TEST of the scram discharge volume scram and control rod block level instrumentation at least once per 31 days.

11. SUBJECT: Technical Specification 4.6.6.1.b.2, page 3/4 6-46.

DISCUSSION: The proposed change to Technical Specification 4.6.6.1.b.2 would revise the surveillance requirement for the Standby Gas Treatment System (SGTS) secondary containment integrity test to agree with the FSAR by changing the negative pressure requirement from greater than or equal to 0.25" to greater than or equal to 0.266" of vacuum water guage (W.G.).

JUSTIFICATION: FSAR Section 6.2.3.2 states that the SGTS has the capability to maintain secondary containment at design negative pressure with a worst case single failure: a postulated 4" line break. Recently completed preoperational tests demonstrated that the SGTS is capable of achieving and maintaining a negative 0.25" W.G. in the secondary containment at a flow rate not exceeding 4000 cfm as required by the current Technical Specifications. However, the test did not allow for the postulated line break as discussed in FSAR Section 6.2.3.2. Calculations show that the postulated line break will provide an additional 125 cfm of infiltration. To account for the additional infiltration, the surveillance negative pressure requirement of greater than or equal to 0.25" W.G. should be changed to greater than or equal to 0.266" W.G. Calculations show that with the negative pressure in the secondary containment at greater than or equal to 0.266" W.G., the SGTS would be able to absorb the additional infiltration and maintain the required -0.25" W.G.

The flow rate of 4000 cfm presented in the FSAR represents the current analytical limit for operation of the SGTS with respect to the dose rate analyses. Offsite and control room dose rates were reanalyzed at a flow rate of 4500 cfm. The reanalysis was performed to provide sufficient margin between the analytical maximum flow rate (4500) and the maximum allowable flow rate currently specified in the subject technical specification, and subsequently employed in the periodic surveillance testing to demonstrate secondary containment integrity. The calculated doses at the higher flow rate of 4500 cfm, as shown in Table 1 attached, are within the 10CFR100 limits for offsite and the 10CFR50 limits for the control room operator.

As mentioned above, the impact of this change to the FSAR dose analyses has been evaluated with respect to maximum allowable control room inleakage. MP&L's report on the successful completion of control room envelope testing was provided to the NRC in letter AECM-83/0333, dated June 16, 1983. While the calculated doses, presented in the attached Table 1, represent a slight increase over doses presented in the above referenced MP&L letter, the conclusion of that report are unchanged.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change will allow the SGTS surveillance test to be conducted consistent with its design capability as presented in the FSAR. The change establishes more stringent requirements for operability of the SGTS by increasing the negative pressure requirements of the secondary containment during a design basis accident. Neither a significant increase in the probability or consequences of an accident previously evaluated nor the possibility of a new or different kind of accident from any accident previously evaluated is involved. Therefore, this change to the Technical Specifications does not involve any significant hazards consideration.

TABLE 1

Type	Dose (Rem) 4000 CFM SGTS Flow Rate	Dose (Rem) 4500 CFM SGTS Flow Rate
Control Room		
Thyroid	29.2	29.3
Whole Body	1.04	1.07
Beta-Skin	15.5	15.8
Site Boundary, 0-2 Hours		
Thyroid	102.3	103.4
Whole Body	11.7	12.5
Low Population Zone, 30-Day		
Thyroid	73.5	74.0
Whole Body	15.4	15.9

3/4.6.6 SECONDARY CONTAINMENT

SECONDARY CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.6.1 SECONDARY CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3 and *.

ACTION:

Without SECONDARY CONTAINMENT INTEGRITY:

a. In OPERATIONAL CONDITION 1, 2 or 3, restore SECONDARY CONTAINMENT INTEGRITY within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. In Operational Condition *, suspend handling of irradiated fuel in the primary or secondary containment, CORE ALTERATIONS and operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.

PCN 81/08 569,322

SURVEILLANCE REQUIREMENTS

4.6.6.1 SECONDARY CONTAINMENT INTEGRITY shall be demonstrated by:

a. Verifying at least once per 31 days that:

1. All Auxiliary Building and Enclosure Building equipment hatches and blowout panels are closed and sealed.

2. The door in each access to the Auxiliary Building and Enclosure Building is closed, except for routine entry and exit.

3. All Auxiliary Building and Enclosure Building penetrations not capable of being closed by OPERABLE secondary containment automatic isolation dampers/valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic dampers/valves secured in position.

b. At least once per 18 months:

1. Verifying that one standby gas treatment subsystem will draw down the secondary containment to greater than or equal to 0.25 inches of vacuum water gauge in less than or equal to 120 seconds, and

2. Operating one standby gas treatment subsystem for one hour and maintaining greater than or equal to ~~0.25~~ 0.266 inches of vacuum water gauge in the secondary containment at a flow rate not exceeding 4000 CFM.

PCN 81/08 569,322

*When irradiated fuel is being handled in the primary or secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.