PROPOSED CHANGE TO THE OPERATING LICENSE NPF-13
PCOL-83/08

Mississippi Power & Light (MP&L) requests that the operating license for Grand Gulf Nuclear Station (GGNS) (NPF-13) be amended as detailed below. These proposed changes, as discussed below, are provided for Nuclear Regulatory Commission (NRC) review and approval per 10CFR50.90.

1. (GGNS - 487 item 2)

SUBJECT: Technical Specification Table 2.2.1-1, page 2-4.

DISCUSSION: Technical Specification Table 2.2.1-1 specifies the Reactor Vessel Dome Pressure-High setpoint as less than or equal to 1065 psig and the allowable value as less than or equal to 1080 psig. The setpoint and allowable value should be changed to less than or equal to 1064.7 psig and less than or equal to 1079.7 psig, respectively.

JUSTIFICATION: General Electric Company (NSSS supplier) design specifications state the setpoint value as less than or equal to 1064.7 psig with an allowable value of less than or equal to 1079.7 psig. General Electric has reviewed the proposed changes and concurs with the new values.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change is administrative in that it corrects an error in the previously identified values for these parameters. This corresponds to NRC example (i) of changes which are not significant hazards considerations. No significant increase in the probability of consequences of an accident previously evaluated is created nor is the possibility of a new or different kind of accident from any accident previously evaluated introduced. No reduction in safety margin is created since the setpoint is proposed to be changed in a conservative direction and the margin between the setpoint and allowable value remains constant. Therefore, this change constitutes no significant hazards considerations.

TABLE 2.2.1-1

REACTOR PROTECTION SYSTEM INSTRUMENTATION SETPOINTS

FUNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUES
1. Intermediate Range Monitor, Neutron Flux-High	≤ 120/125 divisions of full scale	≤ 122/125 divisions of full scale
2. Average Power Range Monitor:		
a. Neutron Flux-High, Setdown	≤ 15% of RATED THERMAL POWER	≤ 20% of RATED THERMAL POWER
b. Flow Biased Simulated Thermal Power-High		
1) Flow Biased	≤ 0.66 W+48%, with a maximum of ≤ 111.0% of RATED THERMAL POWER	≤ 0.66 W+51%, with a maximum of ≤ 113.0% of RATED THERMAL POWER
2) High Flow Clamped	≤ 118% of RATED THERMAL POWER	≤ 120% of RATED THERMAL POWER
c. Neutron Flux-High	NA	NA
d. Inoperative	NA	NA
3. Reactor Vessel Steam Dome Pressure - High	≤ ~~1065~~ 1064.7 psig	≤ ~~1080~~ 1079.7 psig
4. Reactor Vessel Water Level - Low, Level 3	≥ 11.4 inches above instrument zero*	≥ 10.8 inches above instrument zero*
5. Reactor Vessel Water Level-High, Level 8	≤ 53.5 inches above instrument zero*	≤ 54.1 inches above instrument zero*
6. Main Steam Line Isolation Valve - Closure	≤ 6% closed	≤ 7% closed
7. Main Steam Line Radiation - High	≤ 3.0 x full power background	≤ 3.6 x full power background
8. Drywell Pressure - High	≤ 1.73 psig	≤ 1.93 psig
9. Scram Discharge Volume Water Level - High	≤ 60% of full scale	≤ 63% of full scale
10. Turbine Stop Valve - Closure	≥ 40 psig	≥ 0 psig
11. Turbine Control Valve Fast Closure, Trip Oil Pressure - Low	≥ 44.3 psig	≥ 41 psig
12. Reactor Mode Switch Shutdown Position	NA	NA
13. Manual Scram	NA	NA

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

1. (GGNS-487 ITEM 2)

2. (GGNS - 569, 322)

SUBJECT: Technical Specifications as follows:

Specification	Page	Specification	Page
Table 3.3.2-1 (Note *)	3/4 3-14	3.6.6.3 (Action a.2 & b)	3/4 6-53
3.3.2 (Action 21.b)	3/4 3-14	3.7.1.1 (Note *)	3/4 7-1
Table 4.3.2.1-1 (Note *)	3/4 3-23	3.7.1.3 (Note *)	3/4 7-4
Table 3.3.7.1-1 (Note **)	3/4 3-57	3.7.2 (Note *)	3/4 7-5
Table 4.3.7.1-1 (Note **)	3/4 3-59	3.7.2 (Action b.2)	3/4 7-5
3.6.6.1 (Note *)	3/4 6-46	3.8.1.2 (Note *)	3/4 8-9
3.6.6.1 (Action b)	3/4 6-46	3.8.1.2 (Action a)	3/4 8-9
3.6.6.2 (Note *)	3/4 6-47	3.8.2.2 (Note *)	3/4 8-14
3.6.6.2 (Action)	3/4 6-47	3.8.2.2 (Action a)	3/4 8-14
3.6.6.3 (Note *)	3/4 6-53	3.8.3.2 (Note *)	3/4 8-17
		3.8.3.2 (Action a.1 & b.1)	3/4 8-18

DISCUSSION: The Technical Specifications listed above contain statements defining operational conditions and/or actions involving the handling of irradiated fuel assemblies in the primary or secondary containment. Various notes define operational conditions where operability of systems and components providing a protective function during a fuel handling accident is required. Action statements specify restrictions to be applied due to equipment inoperability.

These notes and statements are inconsistent throughout the Technical Specifications. The Technical Specifications are confusing due to terminology differences and it is not clear when the specification applies. The notes and statements should be revised to eliminate confusion and to accurately define the requirements. Specific changes that should be made are as follows:

1. Technical Specification Table 3.3.2-1, note designated "*", page 3/4 3-14.

   Change note to read "When handling irradiated fuel in the primary or secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel."

2. Technical Specification 3.3.2, Action Statement 21.b, page 3/4 3-14.

   Insert the word "primary" so that the statement reads "...irradiated fuel in the primary containment and ..."

3. Technical Specification Table 4.3.2.1-1, Note designated "*" , page 3/4 3-23.

   Insert the words "primary or" so the statement reads "...irradiated fuel in the primary or secondary containment..."

4. Technical Specification Table 3.3.7.1-1, Note designated "**", page 3/4 3-57.

   Insert the words "primary or" so the statement reads "...being handled in the primary or secondary containment."

5. Technical Specification Table 4.3.7.1-1, Note designated "**" page 3/4 3-59.

   Insert the words "primary or" so the statement reads "...being handled in the primary or secondary containment."

6. Technical Specification 3.6.6.1, Note designated "*" page 3/4 6-46.

   Insert the words "primary or" so the statement reads "...handled in the primary or secondary containment and..."

7. Technical Specification 3.6.6.1, Action Statement b, page 3/4 6-46.

   Insert the words "primary or" so the statement reads "...irradiated fuel in the primary or secondary containment ..."

8. Technical Specification 3.6.6.2, Note designated "*" page 3/4 6-47.

   Insert the words "primary or" so the statement reads "...handled in the primary or secondary containment and..."

9. Technical Specification 3.6.6.2, Action Statement, page 3/4 6-47.

   Insert the words "primary or" so the statement reads "...irradiated fuel in the primary or secondary containment..."

10. Technical Specification 3.6.6.3, Note designated "*" page 3/4 6-53.

    Insert the words "primary or" so the statement reads "... being handled in the primary or secondary containment..."

11. Technical Specification 3.6.6.3, Action Statement a.2 and b, page 3/4 6-53.

    Insert the words "primary or" so the statement reads "...irradiated fuel in the primary or secondary containment..."

12. Technical Specification 3.7.1.1, Note designated "*" page 3/4 7-1.

    Replace the words "Auxiliary Building or Enclosure Building" with the words "primary or secondary containment."

13. Technical Specification 3.7.1.3, Note designated "*" page 3/4 7-4.

    Replace the words "Auxiliary Building or Enclosure Building" with the words "primary or secondary containment".

14. Technical Specification 3.7.2, Note designated "*" page 3/4 7-5.

    Insert the words "primary or" so the statement reads "...being handled in the primary or secondary containment".

15. Technical Specification 3.7.2, Action Statement b.2 page 3/4 7-5.

    Insert the words "primary or" so the statement reads "...irradiated fuel in the primary or secondary containment..."

16. Technical Specifications:

    a. 3.8.1.2, note designated "*", page 3/4 8-9.
    b. 3.8.1.2, Action Statement a, page 3/4 8-9.
    c. 3.8.2.2, note designated "*", page 3/4 8-14.
    d. 3.8.2.2, Action Statement a, page 3/4 8-14.
    e. 3.8.3.2, note designated "*", page 3/4 8-17.
    f. 3.8.3.2, Action Statements a.1 and b.1, page 3/4 8-18.

    Replace the words "Auxiliary Building or Enclosure Building" with the words "primary or secondary containment".

JUSTIFICATION: FSAR subsections 15.7.4 and 15.7.6 present an analysis of the Design Basis Fuel Handling Accident. Those systems and their associated components which provide a protective function during this event are the secondary containment, containment and drywell ventilation isolation, fuel handling area ventilation isolation, standby gas treatment, and the control room ventilation system. The analysis assumes an irradiated

fuel assembly is dropped from the fuel handling equipment onto irradiated fuel in the reactor vessel or the spent fuel pool; however, the analysis is also applicable to dropping a fuel assembly onto fuel stored in the primary containment storage racks. Primary containment integrity is not required during fuel handling operations since the secondary containment performs the protective function; however, the containment and drywell ventilation isolation system and components do provide a protective function since the ventilation system represents an additional release path to the environment.

The notes and statements discussed above define operability requirements and conditions for those systems and components that provide a protective function during a fuel handling accident; however, the terminology is inconsistent.

Some statements refer to containment and it is not clear which containment is referenced, (primary or secondary or both). Some statements refer to secondary containment and core alterations; however, "core alterations" does not include stored fuel in the primary containment. Other statements refer to handling operations in the Auxiliary Building and Enclosure Building. These areas are both considered secondary containment; however, associated action statements refer to handling operations in the primary containment. These inconsistencies should be corrected to eliminate confusion and properly define the requirements. Justification for specific changes is provided below:

1. Technical Specification Table 3.3.2-1, note designated "*", page 3/4 3-14.

   This table delineates the operability requirements of isolation actuation instrumentation and includes both primary and secondary isolation instrumentation for ventilation valves; however, the note requiring operability during fuel handling operations does not specifically state that operability is required when handling irradiated fuel in secondary containment. FSAR subsection 15.7.4 provides an analysis of a Fuel Handling Accident in secondary containment. This analysis assumes an automatic isolation of the ventilation system on detection of a high radiation signal from the exhaust fuel storage pool sweep instrumentation.

   FSAR subsection 15.7.6 provides an analysis of a fuel handling accident in primary containment. This analysis assumes automatic isolation of the containment and drywell ventilation system as well as isolation of the secondary containment ventilation system. Isolation is initiated by the containment and drywell ventilation exhaust radiation-high instrumentation and the fuel handling area ventilation exhaust radiation-high high instrumentation, respectively.

The note in this table refers to both primary and secondary isolation instrumentation and should be revised to identify fuel handling operations in either the primary or secondary containment.

2. Technical Specification 3.3.2, Action 21.b, page 3/4 3-14.

   Action Statement 21 applies to only the containment and drywell ventilation exhaust radiation high instrumentation which isolates primary containment ventilation only. For clarity, the statement should be revised to specify primary containment.

3. Technical Specification Table 4.3.2.1-1, note designated "*", page 3/4 3-23.

   This table delineates the surveillance requirements for isolation actuation instrumentation. This is the same instrumentation identified in Table 3.3.2-1. As discussed above operability is required during fuel handling operations in primary or secondary containment; therefore, the note should state the applicable conditions the same as in table 3.3.2-1.

4. Technical Specification Table 3.3.7.1-1, note designated "**", page 3-57.

   This table delineates the operability requirements of radiation monitoring instrumentation which actuates protective functions. The accident analysis in FSAR subsection 15.7.6 assumes isolation of the secondary containment ventilation system and SGTS initiation in response to a fuel handling accident in the primary containment. Therefore, the note should include handling operations in the primary containment.

5. Technical Specification Table 4.3.7.1-1, note designated "**", page 3-59.

   This table delineates surveillance requirements for the instrumentation in Table 3.3.7.1-1; therefore, the note should be changed to require surveillance when operability is required as discussed in item 4.

6. Technical Specification 3.6.6.1, note designated "*", page 3/4 6-46.

   FSAR subsections 15.7.4 and 15.7.6 provide an analysis of a fuel handling accident. The analysis includes accidents within primary containment as well as accidents within secondary containment. Primary containment integrity during fuel handling operations is not required (except ventilation) since secondary containment restricts release. The applicability note in the specification should include fuel handling operations in the primary containment.

7. Technical Specification 3.6.6.1, Action Statement b, page 6-46.

   Secondary containment integrity is also required during irradiated fuel handling within the primary containment as discussed in item 6 above. The specification should be revised to include this requirement.

8. Technical Specification 3.6.6.2, Note designated "*", page 3/4 6-47.

   As discussed in item 6 above, isolation capabilities are required in mitigating a fuel handling accident in primary containment. The note should be revised to include this requirement.

9. Technical Specification 3.6.6.2, Action statement, page 6-47.

   The specification should be revised to include irradiated fuel handling operations as discussed in item 8 above.

10. Technical Specification 3.6.6.3, Note designated "*", page 3/4 6-53.

    FSAR subsections 15.7.4 and 15.7.6 provide an analysis of a fuel handling accident within primary or secondary containment. In both cases operation of the Standby Gas Treatment System is assumed. The note should be revised to require operability while handling irradiated fuel in the primary containment as well as in the secondary containment.

11. Technical Specification 3.6.6.3, Action Statement a.2 and b, page 3/4 6-53.

    As discussed in item 10 above, operability is required during the handling of irradiated fuel in the primary containment; therefore, action requirements should be revised to require suspension of such activities when the SGTS becomes inoperable.

12. Technical Specification 3.7.1.1, note designated "*", page 3/4 7-1.

    This note refers to handling irradiated fuel within the auxiliary building or enclosure building. This terminology is inconsistent with other technical specifications which refer to handling irradiated fuel in the primary or secondary containment. The intent of this specification is to assure electrical power to protective systems in the event of a fuel handling accident. As discussed previously, the fuel handling accident analysis presented in FSAR subsections 15.7.4 and 15.7.6 assumes operability of ventilation isolation systems, radiation

monitoring systems, and the Standby Gas Treatment System; therefore, the note should refer to primary or secondary containment rather than the building designations.

13. Technical Specification 3.7.1.3, Note designated "*", page 3/4 7-4.

    As discussed in item 12, the note should refer to primary or secondary containment rather than the building designations.

14. Technical Specification 3.7.2, Note designated "*", page 3/4 7-5.

    This specification delineates the operability requirements of the control room emergency filtration system. FSAR subsection 6.4 states the control room ventilation system limits exposure to operating personnel to within the guidelines of 10CFR50, Appendix A and general design criterion 19 during any of the design basis accidents. This system is required to be operable during the fuel handling DBA; however, the note refers only to handling fuel in the secondary containment. For a fuel handling accident inside the primary containment, the containment and drywell ventilation system is another release path that must be considered; therefore, the note should also specify irradiated fuel handling operations in the primary containment.

15. Technical Specification 3.7.2, Action statement b.2, page 3/4 7-5.

    As discussed in item 14 above, the handling of irradiated fuel in the primary containment also presents an exposure hazard; therefore, the action should require suspension of these activities.

16. Technical Specifications as follows:

    a. 3.8.1.2, note designated "*", page 3/4 8-9.
    b. 3.8.1.2, Action statement a, page 3/4 8-9.
    c. 3.8.2.2, note designated "*", page 3/4 8-14.
    d. 3.8.2.2, Action statement a, page 3/4 8-14.
    e. 3.8.3.2, note designated "*", page 3/4 8-17.
    f. 3.8.3.2, Action statements a.1 and b.1, page 3/4 8-18.

    In all of these Technical Specifications, the terminology used is inconsistent with other Technical Specifications. These specifications assure electrical power to systems and instrumentation that is required to function during a fuel handling accident within primary or secondary

containment as discussed in FSAR subsections 15.7.4 and 15.7.6. The notes and action statements listed above should be revised to refer to primary and secondary containment rather than the Enclosure and Auxiliary Building.

SIGNIFICANT HAZARDS CONSIDERATIONS:

Evaluation of no significant hazards considerations for these proposed changes are provided below:

1. Technical Specification Table 3.3.2-1, note designated "*", page 3/4 3-14.

   This proposed change is purely administrative in nature in that it clarifies the term "in containment" to mean both primary and secondary containment. This is the broadest interpretation of this term possible and is thus most limiting. Based upon NRC examples (i) and (ii) of Standards for Determining Whether License Amendments Involve No Significant Hazards Considerations, this change constitutes no significant hazard.

2. Technical Specification 3.3.2, Action 21-b, page 3/4 3-14.

   Action Statement 21 applies strictly to a primary containment function associated with isolation resulting from a Containment and Drywell Ventilation Exhaust Radiation - High Signal. The proposed change clarifies this scope. As such it is purely administrative as described in NRC example (i) of amendments not likely to involve significant hazards considerations, this change does not constitute a significant hazard consideration.

3. Technical Specification Table 4.3.2.1-1, note designated "*", page 3/4 3-23.

   This proposed change clarifies the surveillance requirement to be consistent with the operability change proposed in item 1. It is purely administrative and based upon the justification provided by item 1 constitutes no significant hazards considerations.

4. Technical Specification Table 3.3.7.1-1, note designated "**", page 3-57.

   This proposed change expands the operability requirements for the Control Room Radiation Monitor and the Fuel Handling Area Ventilation Exhaust Radiation Monitor to include fuel handling operations in the primary containment. This change, therefore, constitutes an additional restriction not presently included in the Technical Specifications. As such, it corresponds to NRC

example (ii) of amendments not likely to involve significant hazards considerations. Therefore, this change does not constitute a significant hazards consideration.

5. Technical Specification Table 4.1.7.1-1, note designated "**" page 3/4 3-59.

   This proposed change expands OPERATIONAL CONDITIONS for which surveillance is required and clarifies the surveillance requirements to be consistent with the operability change proposed in item 4. It corresponds to NRC example (ii) mentioned in item 4 above and based upon the justification provided in item 4 constitutes no significant hazards considerations.

6. Technical Specification 3.6.6.1, note designated "*", page 3/4 6-46.

   This change expands the OPERATIONAL CONDITIONS for which this LCO is applicable to include the handling of fuel in the primary containment. It corresponds to NRC example (ii) of amendments not likely to involve significant hazards considerations in that it constitutes an additional restriction not presently included in the Technical Specifications therefore, this change does not constitute a significant hazards consideration.

7. Technical Specification 3.6.6.1, Action Statement b, page 3/4 6-46.

   This proposed change adds an additional requirement to suspend handling of irradiated fuel in the primary containment in the event of loss of secondary containment integrity during Operational Condition *. This change is designed to address the fact that primary containment integrity, with the exception of ventilation, is not required during fuel handling operations. Integrity is provided by the secondary containment. As such, this change constitutes an additional restriction not presently included in the Technical Specifications. It corresponds to NRC example (ii) of amendments not likely to involve significant hazards considerations. Therefore, this changes does not constitute a significant hazards consideration.

8. Technical Specification 3.6.6.2, Note designated "*", page 3/4 6-47.

   This change expands the operational conditions for which this LCO is applicable to include the handling of fuel in the primary containment. It corresponds to NRC example (ii) of amendments not likely to involve significant

hazards considerations in that it constitutes an additional restriction not presently included in the Technical Specifications. Therefore, this change does not constitute a significant hazards consideration.

9. Technical Specification 3.6.6.2, Action Statement, page 6-47.

   This change expands restricted operation to include handling of irradiated fuel in the primary containment. For reasons identical to item 8 above, this change does not constitute a significant hazards consideration.

10. Technical Specification 3.6.6.3, Note designated "*", page 3/4 6-53.

    This change expands the OPERATIONAL CONDITIONS for which this LCO is applicable to include the handling of fuel in the primary containment. It corresponds to NRC example (ii) of amendments not likely to involve significant hazards considerations in that it constitutes an additional restriction not presently included in the Technical Specifications. Therefore, this change does not constitute a significant hazards consideration.

11. Technical Specification 3.6.6.3, Action Statement a.2 and b, page 3/4 6-53.

    These changes expand operational restrictions to include handling of irradiated fuel in the primary containment. For reasons identical to 10 above, this changes does not constitute a significant hazards consideration.

12. Technical Specification 3.7.1.1, note designated "*", page 3/4 7-1.

    This proposed change established consistency in nomenclature used to identify areas where the FSAR accident analyses have shown that safety is dependent upon appropriate power available to required safeguards features. This is a purely administrative change corresponding to NRC example (i) of amendments not likely to involve significant hazards considerations. Therefore, this change does not constitute a significant hazards consideration.

13. Technical Specification 3.7.1.3, Note designated "*", page 3/4 7-4.

    This proposed change establishes clarification for the purpose of nomenclature consistency identical to item 12 above. For the reasons discussed in item 12, this change does not constitute a significant hazards consideration.

14. Technical Specification 3.7.2, Note designated "*", page 3/4 7-5.

    The proposed change expands the operability requirements for the Control Room Emergency Filtration System to include fuel handling operations in the primary containment. This change therefore constitutes an additional restriction not presently included in the Technical Specifications. As such, it corresponds to NRC example (ii) of amendments not likely to involve significant hazards considerations. Therefore, this change does not constitute a significant hazards consideration.

15. Technical Specification 3.7.2, Action Statement b.2, page 3/4 7-5.

    This change expands operational restrictions to include handling of irradiated fuel in the primary containment. For reasons identical to 14 above, this change does not constitute a significant hazards consideration.

16. Technical Specification as follows:

    a. 3.8.1.2, Note designated "*", page 3/4 8-9.
    b. 3.8.1.2, Action Statement a, page 3/4 8-9.
    c. 3.8.2.2, note designated "*", page 3/4 8-14.
    d. 3.8.2.2, Action Statement a, page 3/4 8-14.
    e. 3.8.3.2, note designated "*", page 3/4 8-17.
    f. 3.8.3.2, Action Statement a.1 and b.1, page 3/4 8-18.

    All of these proposed changes involve clarifications for the purpose of nomenclature consistency identical to items 12 and 13 above. For the reasons discussed in these items, these changes do 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.

2. (GGNS-52A)
(GGNS-569,322)

INSTRUMENTATION

TABLE 3.3.2-1 (Continued)
ISOLATION ACTUATION INSTRUMENTATION
ACTION

ACTION 20 - Be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

ACTION 21 - Close the affected system isolation valve(s) within one hour or:

a. In OPERATIONAL CONDITION 1, 2, or 3, 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 primary CORE ALTERATIONS, handling of irradiated fuel in the containment and operations with a potential for draining the reactor vessel.

SEE (GGNS-569,322) ITEM 2

ACTION 22 - Restore the manual initiation function to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

ACTION 23 - Be in at least STARTUP with the associated isolation valves closed within 6 hours or be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

ACTION 24 - Be in at least STARTUP within 6 hours.

ACTION 25 - Establish SECONDARY CONTAINMENT INTEGRITY with the standby gas treatment system operating within one hour.

ACTION 26 - Restore the manual initiation function to OPERABLE status within 8 hours or close the affected system isolation valves within the next hour and declare the affected system inoperable.

ACTION 27 - Close the affected system isolation valves within one hour and declare the affected system inoperable.

ACTION 28 - Lock the affected system isolation valves closed within one hour and declare the affected system inoperable.

SEE (GGNS-569,322) ITEM 1

NOTES

primary or secondary

* When handling irradiated fuel in the containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

During CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

(a) See Specification 3.6.4, Table 3.6.4-1 for valves in each valve group.

(b) A channel may be placed in an inoperable status for up to 2 hours for required surveillance without placing the trip system in the tripped condition provided at least one other OPERABLE channel in the same trip system is monitoring that parameter.

(c) Also actuates the standby gas treatment system.

(d) Also actuates the control room emergency filtration system in the isolation mode of operation.

SEE (GGNS-52A)

(e) ~~One upscale and/or two downscale actuate the trip system.~~

(f) Also trips and isolates the mechanical vacuum pumps.

(g) A channel is OPERABLE if 2 of 4 instruments in that channel are OPERABLE.

(h) Also actuates secondary containment ventilation isolation dampers and valves per Table 3.6.6.2-1.

(i) Closes only RWCU system ~~inlet outboard~~ isolation valves G33-F004, G33-F001, G33-F251

(j) Actuates the Standby Gas Treatment System and isolates Auxiliary Building penetrations and the ventilation systems within the Auxiliary Building

Two upscale H.-H. one upscale H.-H. one downscale, or two downscale signals from the same trip system actuate the trip system and initiate isolation of the associated Containment and drywell isolation valves.

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TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

TRIP FUNCTION	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS IN WHICH SURVEILLANCE REQUIRED
6. RHR SYSTEM ISOLATION				
a. RHR Equipment Room Ambient Temperature - High	S	M	R	1, 2, 3
b. RHR Equipment Room Δ Temp. - High	S	M	R	1, 2, 3
c. Reactor Vessel Water Level - Low, Level 3	S	M	R	1, 2, 3
d. Reactor Vessel (RHR Cut-in Permissive) Pressure - High	S	M	R	1, 2, 3
e. Drywell Pressure - High	S	M	R	1, 2, 3
f. Manual Initiation	NA	M(a)	NA	1, 2, 3

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

**When reactor steam pressure ≥ 1045 psig and/or any turbine stop valve is open.

#During CORE ALTERATION and operations with a potential for draining the reactor vessel.

(a) 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 part of circuitry required to be tested for automatic system isolation.

(b) Each train or logic channel shall be tested at least every other 31 days.

2.(GGNS-569,322)

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

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* 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.
(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.

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(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.

2. (GGNS-52B)
(GGNS-569, 322)

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	R	1, 2
4.	Offgas Post-treatment Radiation Monitor	S	M	R	1, 2
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)

* 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.

2. (GGNS-569, 322)

Acol-83/05 321

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2. (GGNS-569,322)

CONTAINMENT SYSTEMS

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

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 inches of vacuum water gauge in the secondary containment at a flow rate not exceeding 4000 CFM.

*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.

2. (GGNS-569,322)

CONTAINMENT SYSTEMS

SECONDARY CONTAINMENT AUTOMATIC ISOLATION DAMPERS/VALVES

LIMITING CONDITION FOR OPERATION

3.6.6.2 The secondary containment ventilation system automatic isolation dampers/ valves shown in Table 3.6.6.2-1 shall be OPERABLE with isolation times less than or equal to the times shown in Table 3.6.6.2-1.

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

ACTION:

With one or more of the secondary containment ventilation system automatic isolation dampers/valves shown in Table 3.6.6.2-1 inoperable, maintain at least one isolation damper/valve OPERABLE in each affected penetration that is open, and within 8 hours either:

a. Restore the inoperable damper/valve(s) to OPERABLE status, or

b. Isolate each affected penetration by use of at least one deactivated automatic damper/valve secured in the isolation position, or

c. Isolate each affected penetration by use of at least one closed manual valve or blind flange.

Otherwise, in OPERATIONAL CONDITION 1, 2 or 3, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

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

SURVEILLANCE REQUIREMENTS

4.6.6.2 Each secondary containment ventilation system automatic isolation damper/ valve shown in Table 3.6.6.2-1 shall be demonstrated OPERABLE:

a. Prior to returning the damper/valve to service after maintenance, repair or replacement work is performed on the damper/valve or its associated actuator, control or power circuit by cycling the damper/valve through at least one complete cycle of full travel and verifying the specified isolation time.

b. During COLD SHUTDOWN or REFUELING at least once per 18 months by verifying that on a containment isolation test signal each isolation damper/valve actuates to its isolation position.

c. By verifying the isolation time to be within its limit when tested pursuant to Specification 4.0.5.

*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.

2. (GGNS-569, 322)

CONTAINMENT SYSTEMS

STANDBY GAS TREATMENT SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.6.3 Two independent standby gas treatment subsystems shall be OPERABLE.

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

ACTION:

a. With one standby gas treatment subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 7 days, or:

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

2. 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.

b. With both standby gas treatment subsystems inoperable in Operational Condition *, suspend handling of irradiated fuel in the primary or secondary containment, CORE ALTERATIONS or operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3. are not applicable.

SURVEILLANCE REQUIREMENTS

4.6.6.3 Each standby gas treatment subsystem shall be demonstrated OPERABLE:

a. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the subsystem operates for at least 10 hours with the heaters OPERABLE.

*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.

2. (GGNS-569, 322)

3/4.7 PLANT SYSTEMS

3/4.7.1 SERVICE WATER SYSTEMS

STANDBY SERVICE WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.1.1 Two independent standby service water (SSW) system subsystems shall be OPERABLE with each subsystem comprised of:

a. One OPERABLE SSW pump, and
b. An OPERABLE flow path capable of taking suction from the associated SSW cooling tower basin and transferring the water through the RHR heat exchangers, ECCS pump room seal coolers, and associated coolers and pump heat exchangers.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, 4, 5 and *.

ACTION:

a. In OPERATIONAL CONDITION 1, 2 or 3:
   1. With one SSW subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
   2. With both SSW subsystems inoperable, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN** within the following 24 hours.

b. In OPERATIONAL CONDITION 3 or 4 with the SSW subsystem, which is associated with an RHR loop required OPERABLE by Specification 3.4.9.1 or 3.4.9.2, inoperable, declare the associated RHR loop inoperable and take the ACTION required by Specification 3.4.9.1 or 3.4.9.2, as applicable.

c. In OPERATIONAL CONDITION 4 or 5 with the SSW subsystem, which is associated with an ECCS pump required OPERABLE by Specification 3.5.2, inoperable, declare the associated ECCS pump inoperable and take the ACTION required by Specification 3.5.2.

d. In OPERATIONAL CONDITION 5 with the SSW subsystem, which is associated with an RHR system required OPERABLE by Specification 3.9.11.1 or 3.9.11.2, inoperable, declare the associated RHR system inoperable and take the ACTION required by Specification 3.9.11.1 or 3.9.11.2, as applicable.

e. In Operational Condition *, with the SSW subsystem, which is associated with a diesel generator required OPERABLE by Specification 3.8.1.2, inoperable, declare the associated diesel generator inoperable and take the ACTION required by Specification 3.8.1.2. The provisions of Specification 3.0.3 are not applicable.

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* When handling irradiated fuel in the ~~Auxiliary Building or Enclosure Building~~ primary or secondary containment.

** Whenever both SSW subsystems are inoperable, if unable to attain COLD SHUTDOWN as required by this ACTION, maintain reactor coolant temperature as low as practical by use of alternate heat removal methods.

2. (GGNS-569, 322)

PLANT SYSTEMS

ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

3.7.1.3 Two independent SSW cooling tower basins shall be OPERABLE, each with:

a. A minimum basin water level at or above elevation 130'3" Mean Sea Level, USGS datum, equivalent to an indicated level of $\geq$ 87".

b. Two OPERABLE cooling tower fans.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, 4, 5 and *.

ACTION:

a. In OPERATIONAL CONDITION 1, 2, or 3 with one SSW cooling tower basin inoperable, declare the associated SSW subsystem inoperable and, if applicable, declare the HPCS service water system inoperable, and take the ACTION required by Specifications 3.7.1.1 and 3.7.1.2, as applicable.

b. In OPERATIONAL CONDITION 4 or 5 with both SSW cooling tower basins inoperable, declare the SSW system and the HPCS service water system inoperable and take the ACTION required by Specifications 3.7.1.1 and 3.7.1.2.

c. In Operational Condition * with both SSW cooling tower basins inoperable, declare the SSW system inoperable and take the ACTION required by Specification 3.7.1.1. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.1.3 Two SSW cooling tower basins shall be determined OPERABLE at least once per:

a. 24 hours by verifying basin water level to be greater than or equal to 87".

b. 31 days by starting each SSW cooling tower fan from the control room and operating the fan for at least 15 minutes.

c. 18 months by verifying that each SSW cooling tower fan starts automatically when the associated SSW subsystem is started.

* When handling irradiated fuel in the ~~Auxiliary Building or Enclosure Building~~ primary or secondary containment.

2. (GGNS-569, 322)

PLANT SYSTEMS

3/4.7.2 CONTROL ROOM EMERGENCY FILTRATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.2 Two independent control room emergency filtration system subsystems shall be OPERABLE.

APPLICABILITY: All OPERATIONAL CONDITIONS and *.

ACTION:

a. In OPERATIONAL CONDITION 1, 2 or 3 with one control room emergency filtration subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 7 days 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 4, 5 or *:

1. With one control room emergency filtration subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 7 days or initiate and maintain operation of the OPERABLE subsystem in the isolation mode of operation.

2. With both control room emergency filtration subsystems inoperable, suspend CORE ALTERATIONS, handling of irradiated fuel in the primary or secondary containment and operations with a potential for draining the reactor vessel.

c. The provisions of Specification 3.0.3 are not applicable in Operational Condition *.

SURVEILLANCE REQUIREMENTS

4.7.2 Each control room emergency filtration subsystem shall be demonstrated OPERABLE:

a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the subsystem operates for at least 10 hours with the heaters OPERABLE.

b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the subsystem by:

1. ~~Verifying that with the subsystem operating at a flow rate of 4000 cfm ± 10% and exhausting through the HEPA filters and charcoal adsorbers, the total bypass flow of the system to the facility vent is less than or equal to 1% when the subsystem is tested by admitting cold DOP at the system intake.~~

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

2. (GGNS-569, 322)

ELECTRICAL POWER SYSTEMS

A.C. SOURCES - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.1.2 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

a. One circuit between the offsite transmission network and the onsite Class 1E distribution system, and

b. Diesel generator 11 and/or 12, and diesel generator 13 when the HPCS system is required to be OPERABLE, with each diesel generator having:

1. A day tank containing a minimum of 220 gallons of fuel.

2. A fuel storage system containing a minimum of:

a) 48,000 gallons of fuel each for diesel generators 11 and 12.

b) 39,000 gallons of fuel for diesel generator 13.

3. A fuel transfer pump.

APPLICABILITY: OPERATIONAL CONDITIONS 4, 5 and *.

ACTION:

a. With all offsite circuits inoperable and/or with diesel generators 11 and/or 12 of the above required A.C. electrical power sources inoperable, suspend CORE ALTERATIONS, handling of irradiated fuel in the ~~Auxiliary Building and Enclosure Building~~ primary or secondary containment, operations with a potential for draining the reactor vessel and crane operations over the spent fuel storage pool when fuel assemblies are stored therein. In addition, when in OPERATIONAL CONDITION 5 with the water level less than 23 feet above the reactor pressure vessel flange, immediately initiate corrective action to restore the required power sources to OPERABLE status as soon as practical.

b. With diesel generator 13 of the above required A.C. electrical power sources inoperable, restore the inoperable diesel generator 13 to OPERABLE status within 72 hours or declare the HPCS system inoperable and take the ACTION required by Specification 3.5.2 and 3.5.3.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.8.1.2 At least the above required A.C. electrical power sources shall be demonstrated OPERABLE per Surveillance Requirements 4.8.1.1.1, 4.8.1.1.2 and 4.8.1.1.3, except for the requirement of 4.8.1.1.2.a.5.

* When handling irradiated fuel in the ~~Auxiliary Building or Enclosure Building~~ primary or secondary containment

2. (GGNS-569, 322)

ELECTRICAL POWER SYSTEMS

D.C. SOURCES - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.2.2 As a minimum, Division 1 or Division 2, and, when the HPCS system is required to be OPERABLE, Division 3, of the D.C. electrical power sources shall be OPERABLE with:

a. Division 1 consisting of:
   1. 125 volt battery 1A3.
   2. 125 volt full capacity charger 1A4 or 1A5.

b. Division 2 consisting of:
   1. 125 volt battery 1B3.
   2. 125 volt full capacity charger 1B4 or 1B5.

c. Division 3 consisting of:
   1. 125 volt battery 1C3.
   2. 125 volt full capacity charger 1C4.

APPLICABILITY: OPERATIONAL CONDITIONS 4, 5 and *.

ACTION:

a. With both Division 1 battery and Division 2 battery of the above required D.C. electrical power sources inoperable, suspend CORE ALTERATIONS, handling of irradiated fuel in the ~~Auxiliary Building and Enclosure Building~~ Primary or secondary containment and operations with a potential for draining the reactor vessel.

b. With Division 3 battery of the above required D.C. electrical power sources inoperable, declare the HPCS system inoperable and take the ACTION required by Specification 3.5.2 and 3.5.3.

c. With the above required full capacity charger inoperable, demonstrate the OPERABILITY of its associated battery by performing Surveillance Requirement 4.8.2.1.a.1 within one hour and at least once per 8 hours thereafter. If any Category A limit in Table 4.8.2.1-1 is not met, declare the battery inoperable.

d. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.8.2.2 At least the above required battery and charger shall be demonstrated OPERABLE per Surveillance Requirement 4.8.2.1.

* When handling irradiated fuel in the ~~Auxiliary Building and Enclosure Building~~ primary or secondary containment

2. (GGNS-569,322)

ELECTRICAL POWER SYSTEMS

DISTRIBUTION - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.3.2 As a minimum, the following power distribution system divisions shall be energized:

a. For A.C. power distribution, Division 1 or Division 2, and when the HPCS system is required to be OPERABLE, Division 3, with:

1. Division 1 consisting of:

a) 4160 volt A.C. bus 15AA.
b) 480 volt A.C. MCCs 15B11, 15B21, 15B31, 15B41, 15B51 and 15B61.
c) 120 volt A.C. distribution panels in 15P11, 15P21, 15P31, 15P41, 15P51 and 15P61.
d) LCCs 15BA1, 15BA2, 15BA3, 15BA4, 15BA5 and 15BA6.

2. Division 2 consisting of:

a) 4160 volt A.C. bus 16AB.
b) 480 volt A.C. MCCs 16B11, 16B21, 16B31, 16B41, 16B51 and 16B61.
c) 120 volt A.C. distribution panels in 16P11, 16P21, 16P31, 16P41, 16P51 and 16P61.
d) LCCs 16BB1, 16BB2, 16BB3, 16BB4, 16BB5 and 16BB6.

3. Division 3 consisting of:

a) 4160 volt A.C. bus 17AC.
b) 480 volt A.C. MCCs 17B01 and 17B11.
c) 120 volt A.C. distribution panels 17P11.

4. The OPERABLE load shedding and sequencing panel associated with the division(s) required to be energized.

b. For D.C. power distribution, Division 1 or Division 2, and when the HPCS system is required to be OPERABLE, Division 3, with:

1. Division 1 consisting of 125 volt D.C. distribution panel 1DA1 and 1DA2.

2. Division 2 consisting of 125 volt D.C. distribution panel 1DB1 and 1DB2.

3. Division 3 consisting of 125 volt D.C. distribution panel 1DC1.

APPLICABILITY: OPERATIONAL CONDITIONS 4, 5 and *.

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*When handling irradiated fuel in the ~~Auxiliary Building and Enclosure Building~~ primary or secondary containment

2. (GGNS-569, 322)

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION:

a. For A.C. power distribution:

1. With both Division 1 and Division 2 of the above required A.C. distribution system not energized and/or with the load shedding and sequencing panel associated with the division(s) required to be energized inoperable, suspend CORE ALTERATIONS, handling of irradiated fuel in the ~~Auxiliary Building and Enclosure Building~~ and operations with a potential for draining the primary or secondary containment reactor vessel.

2. With Division 3 of the above required A.C. distribution system not energized, declare the HPCS system inoperable and take the ACTION required by Specification 3.5.2 and 3.5.3.

b. For D.C. power distribution:

1. With both Division 1 and Division 2 of the above required D.C. distribution system not energized, suspend CORE ALTERATIONS, handling of irradiated fuel in the ~~Auxiliary Building and Enclosure Building~~ and operations with a potential for draining primary or secondary containment the reactor vessel.

2. With Division 3 of the above required D.C. distribution system not energized, declare the HPCS system inoperable and take the ACTION required by Specification 3.5.2 and 3.5.3.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

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4.8.3.2.1 At least the above required power distribution system divisions shall be determined energized at least once per 7 days by verifying correct breaker alignment ~~and voltage on the busses/MCCs/panels.~~ on the busses/LCs/MCCs/panels and voltage on the busses

4.8.3.2.2 The above required load shedding and sequencing panel(s) shall be demonstrated OPERABLE:

a. At least once per 12 hours by determining that the auto-test system is operating and is not indicating a faulted condition.

b. At least once per 31 days by performance of a manual test and verifying response within the design criteria to the following test inputs:

a) LOCA.
b) Bus undervoltage.
c) Bus undervoltage followed by LOCA.
d) LOCA followed by bus undervoltage.

3. (GGNS - 52A)

SUBJECT: Technical Specification 3/4.3.2, Table 3.3.2-1, page 3/4 3-14.

DISCUSSION: Footnote (e) of Table 3.3.2-1 concerns the trips from the containment and drywell ventilation exhaust radiation monitoring system which actuate the trip system(s) to isolate the associated containment and drywell isolation valves. This note presently incorrectly states that "one upscale and/or two downscale actuate the trip system". The correct logic is that "Two upscale-Hi Hi, one upscale-Hi Hi and one downscale, or two downscale signals from the same trip system actuate the trip system". There are two trip systems and each trip system isolates its associated containment and drywell isolation valves. The footnote should be changed to indicate the correct logic.

JUSTIFICATION: Footnote (e) presently does not correctly indicate the signals which actuate each trip system. The proposed change will correct the footnote to reflect the system logic as described in FSAR section 11.5.2.1.2.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change is designated to accurately reflect Containment and Drywell Ventilation Exhaust Radiation actuation logic as described in FSAR Section 11.5.2.1.2. 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 an accident previously evaluated. Since Table 3.3.2-1 remains unchanged in that a minimum of 2 channels per trip system are required for operability, no reduction in a margin of safety is created. Therefore, this proposed change constitutes no significant hazards consideration.

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

3. (GGNS-52A)
(GGNS-569, 322)

TABLE 3.3.2-1 (Continued)
ISOLATION ACTUATION INSTRUMENTATION

ACTION

ACTION 20 - Be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

ACTION 21 - Close the affected system isolation valve(s) within one hour or:

a. In OPERATIONAL CONDITION 1, 2, or 3, 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 primary CORE ALTERATIONS handling of irradiated fuel in the containment and operations with a potential for draining the reactor vessel.

(SEE (GGNS-569, 322) ITEM 2)

ACTION 22 - Restore the manual initiation function to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

ACTION 23 - Be in at least STARTUP with the associated isolation valves closed within 6 hours or be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

ACTION 24 - Be in at least STARTUP within 6 hours.

ACTION 25 - Establish SECONDARY CONTAINMENT INTEGRITY with the standby gas treatment system operating within one hour.

ACTION 26 - Restore the manual initiation function to OPERABLE status within 8 hours or close the affected system isolation valves within the next hour and declare the affected system inoperable.

ACTION 27 - Close the affected system isolation valves within one hour and declare the affected system inoperable.

ACTION 28 - Lock the affected system isolation valves closed within one hour and declare the affected system inoperable.

(SEE (GGNS-569, 322) ITEM 1)

NOTES

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

During CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

(a) See Specification 3.6.4, Table 3.6.4-1 for valves in each valve group.

(b) A channel may be placed in an inoperable status for up to 2 hours for required surveillance without placing the trip system in the tripped condition provided at least one other OPERABLE channel in the same trip system is monitoring that parameter.

(c) Also actuates the standby gas treatment system.

(d) Also actuates the control room emergency filtration system in the isolation mode of operation.

(SEE (GGNS-52A))

~~(e) One upscale and/or two downscale actuate the trip system.~~

Two upscale W.-W. one upscale W.-W. one downscale, or two downscale signals from the same trip system actuate the trip system and initiate isolation of the associated Containment and Drywell isolation valves.

(f) Also trips and isolates the mechanical vacuum pumps.

(g) A channel is OPERABLE if 2 of 4 instruments in that channel are OPERABLE.

(h) Also actuates secondary containment ventilation isolation dampers and valves per Table 3.6.6.2-1.

(i) Closes only RWCU system ~~inlet outboard~~ isolation valves (3) G33-F004, G33-F001, & G33-F251

(j) Actuates the Standby Gas Treatment System and isolates Auxiliary Building penetrations of the ventilation systems within the Auxiliary Building

Add 4a & 4b

4. (GGNS - 650)

SUBJECT: Technical Specification Table 3.3.3-3, page 3/4 3-30.

DISCUSSION: The above referenced table lists response times for the Emergency Core Cooling systems. However, no units are listed for the times. The word "seconds" should be added to the heading of the table.

JUSTIFICATION: The above described change adds clarity to the table and is consistent with the BWR-6 Standard Technical Specifications.

SIGNIFICANT HAZARDS CONSIDERATION:

The above change is purely administrative in that it corrects an error of omission of the units of the table values. The units are consistent with the BWR-6 Standard Technical Specifications. Based upon NRC example (i) of standards for Determining Whether License Amendments Involve No Significant Hazards Consideration, this change constitutes no significant hazards considerations.

4.(GGNS-650)

TABLE 3.3.3-3

EMERGENCY CORE COOLING SYSTEM RESPONSE TIMES (SECONDS)

1.	LOW PRESSURE CORE SPRAY SYSTEM	$\leq$ 40
2.	LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM	
	a. Pumps A and B	$\leq$ 45
	b. Pump C	$\leq$ 40
3.	AUTOMATIC DEPRESSURIZATION SYSTEM	NA
4.	HIGH PRESSURE CORE SPRAY SYSTEM	$\leq$ 27
5.	LOSS OF POWER	NA

5. (GGNS - 451)

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

DISCUSSION: Technical Specification 4.3.3.1 requires surveillance testing in accordance with Table 4.3.3.1-1 which requires functional testing and calibration of Division 1 and 2 Bus undervoltage protection. There are three (3) levels of undervoltage protection provided. Each level of protection has a time delay associated with the trip point. These time delays are provided by the Load Shedding and Sequencing (LSS) Panel. The design of this panel precludes testing and calibration of the built-in time delay function.

The Technical Specification should be changed to add a note (e) to the monthly surveillance and a note (f) to the refueling surveillance as follows:

(e) Functional testing of time delay not required.
(f) Calibration of time delay not required. Time delay to be verified by channel functional test.

JUSTIFICATION: The LSS panel is a solid-state digital system utilizing printed circuit cards for logic and timing functions. It is not possible to check individual timers with the LSS panel. Time delays can only be determined by measuring the time between a test input and panel output. This requires actual panel actuation (load shedding and sequencing); therefore, this testing cannot be performed during operation. The panel is equipped with an automatic test function which provides continuous operational surveillance. This testing verifies functioning of the time delays. Technical Specification 4.8.3.1.2.a requires verifying the operation of the automatic test system at least once per 12 hours.

The timing sequences and time delays within the LSS panel are actually programmable (rocker switches) printed circuit cards; therefore, time delays are a programmed constant and cannot be calibrated. The Channel Functional Test associated with channel calibration conducted at 18 months intervals will include verifying the time delay from the test signal input to panel output. This will verify proper setting of the time delay and proper operation of the printed circuit card.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change establishes appropriate surveillance requirements for Division 1 and 2 Bus undervoltage protection to meet the intent of the Technical Specification, i.e., operability of the ECCS actuation instrumentation through verification of proper actuation and sequencing. The Load Shedding and Sequencing (LSS) Panel design precludes testing and calibration of the as-built time delay function. Compensation for this design feature includes:

(1) Panel automatic test function for operational surveillance with an associated Technical Specification surveillance requirement for this feature.

(2) Solid state design of timing sequences and delays.

(3) Channel Functional Testing as 18 month intervals with associated time delay verification.

LSS Panel testing will therefore provide appropriate assurance of system operability for its unique design.

Changes proposed in the surveillance requirements do not constitute a significant increase in the probability or consequences of a previously evaluated accident nor do they create the possibility of a new or different type of accident from any previously evaluated. LSS Panel features as described in this proposed change demonstrate that no significant reduction in safety margin will occur. Therefore, this change constitutes no 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 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	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	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(e)	R(f)	1, 2, 3, 4**, 5**
b. 4.16 kV Bus Undervoltage (BOP Load Shed)	NA	M(e)	R(f)	1, 2, 3, 4**, 5**
c. 4.16 kV Bus Undervoltage (Degraded Voltage)	NA	M(e)	R(f)	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**

5.p.1.(GGNS-451)

TABLE 4.3.3.1-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

NOTATION

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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 3.5.2 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.

(e) FUNCTIONAL TESTING OF TIME DELAY NOT REQUIRED.

(f) CALIBRATION OF TIME DELAY NOT REQUIRED. TIME DELAY TO BE VERIFIED BY CHANNEL FUNCTIONAL TEST, CONDUCTED AS PART OF CHANNEL CALIBRATION.

6. (GGNS - 52B)

SUBJECT: Technical Specification 3/4.3.7, Table 3.3.7.1-1, pages 3/4 3-56 and 3/4 3-57.

DISCUSSION: The alarm/trip setpoint for instrument 4 (offgas post-treatment radiation monitor) should be changed as follows:

The trip setpoint which is presently indicated as a (Hi Hi) setpoint should be changed to (Hi Hi Hi). As discussed in FSAR section 11.5.2.2.2, the trip logic is based on the Hi Hi Hi and downscale trip circuit outputs, and closes the offgas system discharge and drain valves. The Hi and Hi Hi Hi trips are annunciated in the control room. (The Hi Hi is also annunciated in the control room).

The comma (,) between the Hi alarm and the Hi Hi Hi trip setpoint should be replaced by a slash (/) to clearly distinguish between the alarm and trip setpoint values.

In conjunction with the change in the trip setpoint nomenclature to Hi Hi Hi, the footnote (a) should be changed accordingly to indicate Hi Hi Hi.

The present footnote (a) does not adequately explain the trip logic for instruments 7, 8, and 9 (containment and drywell ventilation exhaust radiation monitor; fuel handling area ventilation exhaust radiation monitor; and fuel handling area pool sweep exhaust radiation monitor). Each of these have the same trip logic which is "Two upscale-Hi Hi, one upscale-Hi Hi and one downscale, or two downscale signals from the same trip system actuate the trip system." Each trip system then isolates the associated isolation valves. A new footnote (h) should be added to indicate the correct logic.

JUSTIFICATION: These changes are proposed to correctly indicate the signals which actuate each trip system. The proposed changes will reflect the system logic as described in FSAR sections 11.5.2.1.2, 11.5.2.1.3, 11.5.2.1.4, and 11.5.2.2.2.

SIGNIFICANT HAZARDS CONSIDERATION:

This proposed change corrects the nomenclature used in the Technical Specification with respect to actuation logic signals to be consistent with the discussion found in the FSAR. No change to the actual initiation logic is involved. This change is purely administrative in nature as described by NRC example (i) of amendments not likely to involve significant hazards considerations. Therefore, this change constitutes no 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 3.3.7.1-1

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	10^{1} 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	10^{1} to 10^6 cpm	70
3.	Offgas Pre-treatment Radiation Monitor	1	1, 2	$\leq 5 \times 10^3$ mR/hr/NA	1 to 10^6 mR/hr	70
4.	Offgas Post-treatment Radiation Monitor	2(a)	1, 2	$\leq 1 \times 10^5$ cpm (Hi)/ $\leq 1.0 \times 10^6$ cpm ~~(Hi-Hi)~~ Hi-Hi	10^{1} 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	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(#)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(#)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(#)h	(c)	$\leq$ 18 mR/hr/ $\leq$35 mR/hr(d)#	10^{-2} to 10^2 mR/hr	75

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6.9.1 (GGNS-52B)

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

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* 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.
(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.

(GGNS-528)
(GGNS-569, 322)

G.P.L. PCOL 85/05 321

7. (GGNS - 535)

SUBJECT: Technical Specification 3/4.3.7.12, Table 4.3.7.12-1, page 3/4 3-94.

DISCUSSION: Instrument 7 (the Offgas System post-treatment monitors) of Table 4.3.7.12-1 has a ## symbol pertaining to its Channel Calibration (at an 18 month frequency) which imposes a requirement that the sensor be calibrated for millirem/hour (mr/hr) from the calibration standard and then converted to release rate (i.e., millicuries/sec) within one week of unit operation. This footnote is not appropriate for the Offgas System post-treatment monitors which readout in counts per minute (CPM). The ## denoted on the Channel Calibration for this monitor should be deleted.

JUSTIFICATION: The footnote ## is appropriate for Instrument 6 (Offgas System pre-treatment monitor) which is calibrated in accordance with the methodology described in the footnote ## and which has a Technical Specification limit specified in millicuries/second in Technical Specification 3.11.2.7. Footnote ##, however, is not appropriate for Instrument 7 (post-treatment monitors).

It is not necessary to calibrate these post-treatment monitors in mr/hr from the calibration standard and then convert results to release rate. The post-treatment monitors are calibrated using a known microcuries/milliliter (uCi/ml) source to determine a CPM/uCi/ml calibration (sensitivity) factor which is used to relate uCi/ml to the indicated CPM reading. The post-treatment monitors readout in CPM and have alarm and trip setpoints specified in CPM in Technical Specification Table 3.3.7.1-1 (Instrument 4 - offgas post-treatment radiation monitor).

SIGNIFICANT HAZARDS CONSIDERATION:

As identified in FSAR Table 11.5-1, the Offgas System post-treatment monitor reads out in counts per minute. Calibration in millirem/hour is therefore inappropriate. This change is purely administrative in that it deletes the use of the millirem/hour standard yet retains the channel calibration requirement at the existing 18 month frequency. Based upon this evaluation, this change is purely administrative in nature as described by NRC example (i) of amendments not likely to involve significant hazards considerations. Therefore this change constitutes no 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 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(1)	**

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

7. (GGNS-535)

8. (GGNS - 589)

SUBJECT: Technical Specification 3.4.2.1, page 3/4 4-5.

DISCUSSION: The limiting condition for operation of Technical Specification 3.4.2.1 specifies the number of safety/relief valves which shall be operable and also provides the lift settings for the safety/relief valves. The lift settings are provided as a setpoint (in psig) plus or minus one percent (±1%).

The ±1% (i.e., 11.6 psi for a 1165 psig setpoint, 11.8 psi for a 1180 psig setpoint, and 11.9 for a 1190 psig setpoint) is appropriate for the safety valve function in this specification. However, the ±1% is more conservative than the drift allowance assigned to the setpoints for the relief valve function in this specification. Technical Specification 3.4.2.1 should be amended to reflect the ±15 psi tolerance (drift allowance) specified in the General Electric design specification for the setpoints for the relief valve function and the 11.6, 11.8, and 11.9 psi setpoints for the safety valve setpoints.

JUSTIFICATION: The General Electric design specification stipulates a nominal setpoint which is consistent with the relief valve function setpoint in 3.4.2.1, with a drift allowance of ±15 psi versus the ±1% (approximately 11.0 to 11.2 psi) in 3.4.2.1. This proposed change will provide the correct tolerance (drift allowance) of ±15 psi for the relief valve function in this specification.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change is administrative in that it revises the drift allowance for the relief valve function of the safety/relief valves to coincide with the design specification for these valves. This minor increase in drift allowance is well within the analytical limits described in FSAR Section 5.2.2.2.2.4 which were assured in performing the transient overpressure analyses. Consequently, no significant reduction in safety margin is created. Therefore, this change constitutes no significant hazards considerations.

8. (GGNS-589)

REACTOR COOLANT SYSTEM

3/4.4.2 SAFETY VALVES

SAFETY/RELIEF VALVES

LIMITING CONDITION FOR OPERATION

3.4.2.1 Of the following safety/relief valves, the safety valve function of at least 7 valves and the relief valve function of at least 6 valves other than those satisfying the safety valve function requirement shall be OPERABLE with the specified lift settings:

Number of Valves	Function	Setpoint* (psig) ~~±3%~~
8	Safety	1165 ± 11.6 psi
6	Safety	1180 ± 11.8 psi
6	Safety	1190 ± 11.9 psi
1	Relief	1103 ± 15 psi
10	Relief	1113 ± 15 psi
9	Relief	1123 ± 15 psi

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 3.

ACTION:

a. With the safety and/or relief valve function of one or more of the above required safety/relief valves inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

b. With one or more safety/relief valves stuck open, provided that suppression pool average water temperature is less than 105°F, close the stuck open relief valve(s); if unable to close the open valve(s) within 2 minutes or if suppression pool average water temperature is 105°F or greater, place the reactor mode switch in the Shutdown position.

c. With one or more safety/relief tail-pipe pressure switches inoperable, restore the inoperable switch(es) to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.4.2.1.1 The tail-pipe pressure switch for each safety/relief valve shall be demonstrated OPERABLE with the setpoint verified to be 30 ± 5 psig by performance of a:

a. CHANNEL FUNCTIONAL TEST at least once per 31 days, and a
b. CHANNEL CALIBRATION at least once per 18 months.**

4.4.2.1.2 The relief valve function pressure actuation instrumentation shall be demonstrated OPERABLE by performance of a:

a. CHANNEL FUNCTIONAL TEST, including calibration of the trip unit, at least once per 31 days.
b. CHANNEL CALIBRATION, LOGIC SYSTEM FUNCTIONAL TEST and simulated automatic operation of the entire system at least once per 18 months.

*The lift setting pressure shall correspond to ambient conditions of the valves at nominal operating temperatures and pressures.

**The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test.

9. (GGNS - 502)

SUBJECT: Technical Specification 3.4.2.2, page 3/4 4-6.

DISCUSSION: The limiting condition for operation of Technical Specification 3.4.2.2 specifies the relief valves with the low-low set function which shall be operable and also provides the low-low set function lift settings for these relief valves. The low-low set function lift settings are provided as a setpoint (in psig) plus or minus one percent (±1%).

The ±1% is appropriate for the safety valve function for these valves as presented in Technical Specification 3.4.2.1. However, the ±1% is more conservative than the drift allowance assigned to the setpoints for the relief valve low-low set function in this specification. Technical Specification 3.4.2.2 should be amended to reflect the ±15 psi tolerance (drift allowance) specified in the General Electric design specification for the setpoints for the relief valve low-low set function.

JUSTIFICATION: The General Electric design specification stipulates a nominal setpoint which is consistent with the relief valve low-low set function setpoint in 3.4.2.2, with a drift allowance of ±15 psi versus the ±1% (approximately 10.3 to 11.1 psi) in 3.4.2.2. This proposed change will provide the correct tolerance (drift allowance) of ±15 psi for the relief valve low-low set function in this specification.

SIGNIFICANT HAZARDS CONSIDERATION:

This proposed change establishes consistency with the requested change to Technical Specification 3.4.2.1, page 3/4 4-5 (GGNS-589) in that it incorporates the drift allowance for the relief valve function of the safety/relief valves to coincide with their design specification. This change is administrative in nature and for the reasons discussed in the above mentioned proposed change does not constitute significant hazards consideration.

9.(GGNS-502)

REACTOR COOLANT SYSTEM

SAFETY/RELIEF VALVES LOW-LOW SET FUNCTION

LIMITING CONDITION FOR OPERATION

3.4.2.2 The relief valve function and the low-low set function of the following reactor coolant system safety/relief valves shall be OPERABLE with the following low-low set function lift settings:

Valve No.	Setpoint* (psig) ~~±1%~~ ±15psi	
	Open	Close
F051D	1033	926
F051B	1073	936
F047D	1113	946
F047G	1113	946
F051A	1113	946
F051F	1113	946

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 3.

ACTION:

a. With the relief valve function and/or the low-low set function of one of the above required reactor coolant system safety/relief valves inoperable, restore the inoperable relief valve function and the low-low set function to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. With the relief valve function and/or the low-low set function of more than one of the above required reactor coolant system safety/relief valves inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

SURVEILLANCE REQUIREMENTS

4.4.2.2.1 The relief valve function and the low-low set function pressure actuation instrumentation shall be demonstrated OPERABLE by performance of a:

a. CHANNEL FUNCTIONAL TEST, including calibration of the trip unit, at least once per 31 days.

b. CHANNEL CALIBRATION, LOGIC SYSTEM FUNCTIONAL TEST and simulated automatic operation of the entire system at least once per 18 months.

*The lift setting pressure shall correspond to ambient conditions of the valves at nominal operating temperatures and pressures.

10. (GGNS - 605, 606)

SUBJECT: Technical Specifications 3.6.1.3 and 3.6.2.3, pages 3/4 6-5 and 3/4 6-6, and pages 3/4 6-15 and 3/4 6-16.

DISCUSSION: Technical Specifications 3.6.1.3 and 3.6.2.3 refer to the containment and drywell air lock door inflatable seal system "air flask" pressure instrumentation channels. The GGNS design for the containment and drywell air lock door seal systems does not provide instrumentation channels for the air lock door seal system air tanks (flasks). Instrumentation is provided instead for each air lock door inflatable seal (i.e., for each of the two seals on both doors of the air lock). The Technical Specifications should be amended to reflect the correct instrumentation for the air lock door seal systems.

Surveillance Requirements 4.6.1.3.d.3 and 4.6.2.3.d.3 specify surveillance leak tests of the air lock door seal pneumatic systems from an initial pressure of 104.7 psig. This initial pressure should be changed to 90.0 psig corresponding to the air supply pressure to the seal system of 90 psig to 100 psig.

JUSTIFICATION: The proposed change to the Technical Specifications correctly specifies the instrumentation channel provided for each air lock door inflatable seal in accordance with the GGNS design. The change also indicates the initial pressure for conduct of the surveillance leak tests of the air lock door seal pneumatic systems as 90.0 psig. The pressure of the air supply to the air lock door seals will be between 90 psig and 100 psig. The corresponding starting pressure for the leak test should be within the pressure range for the air supply to the door seals.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change corrects an error in the units for the initial pressure during the seal pneumatic system leak rate test. This is purely an administrative change. The change also modifies the Technical Specifications to be consistent with existing plant design. No change in the margin of safety is created since the intent of the surveillance requirement, i.e., assuring air lock operability and integrity, is still served. Since this change does not involve a significant increase in the probability or consequences of an accident previously evaluated nor create the possibility of a new or different kind of accident from any accident previously evaluated, this change does not constitute a significant hazards consideration.

CONTAINMENT SYSTEMS

CONTAINMENT AIR LOCKS

LIMITING CONDITION FOR OPERATION

3.6.1.3 Each containment air lock shall be OPERABLE with:

a. Both doors closed except when the air lock is being used for normal transit entry and exit through the containment, then at least one air lock door shall be closed, and

b. An overall air lock leakage rate of less than or equal to 2 scf per hour at P_a, 11.5 psig.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2* and 3.

ACTION:

a. With one containment air lock door inoperable:

1. Maintain at least the OPERABLE air lock door closed and either restore the inoperable air lock door to OPERABLE status within 24 hours or lock the OPERABLE air lock door closed.

2. Operation may then continue until performance of the next required overall air lock leakage test provided that the OPERABLE air lock door is verified to be locked closed at least once per 31 days.

3. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

4. The provisions of Specification 3.0.4 are not applicable.

b. With the containment air lock inoperable, except as a result of an inoperable air lock door, maintain at least one air lock door closed; restore the inoperable air lock to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

c. With one containment air lock door inflatable seal system ~~air flask~~ pressure instrumentation channel inoperable, restore the inoperable channel to OPERABLE status within 7 days or verify ~~air flask~~ pressure to be ≥ 60 psig at least once per 12 hours.

SEAL

THE ASSOCIATED INFLATABLE SEAL

*See Special Test Exception 3.10.1.

SURVEILLANCE REQUIREMENTS

4.6.1.3 Each containment air lock shall be demonstrated OPERABLE:

a. Within 72 hours after each closing, except when the air lock is being used for multiple entries, then at least once per 72 hours, by verifying seal leakage rate less than or equal to 2 scf per hour when the gap between the door seals is pressurized to Pa, 11.5 psig.

b. By conducting an overall air lock leakage test at P_a, 11.5 psig, and verifying that the overall air lock leakage rate is within its limit:

1. At least once per 6 months#, and

2. Prior to establishing PRIMARY CONTAINMENT INTEGRITY when maintenance has been performed on the air lock that could affect the air lock sealing capability.*

c. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.

d. By verifying, EACH AIRLOCK the door inflatable seal system OPERABLE by:

1. Demonstrating EACH OF THE two seal ~~air flask~~ INFLATABLE pressure instrumentation channels PER AIRLOCK DOOR OPERABLE by performance of a:

a) CHANNEL FUNCTIONAL TEST at least once per 31 days, and

b) CHANNEL CALIBRATION at least once per 18 months,

with a low pressure setpoint of $\geq$ 60 psig.

2. At least once per 7 days, verifying seal air flask pressure to be greater than or equal to 60 psig.

3. At least once per 18 months, conducting a seal pneumatic system leak test and verifying that system pressure does not decay more than 2 psig from 104.7 ~~psig~~ PSIA within 48 hours.

#The provisions of Specification 4.0.2 are not applicable.

*Exemption to Appendix J of 10 CFR 50.

10.p.3(GGNS-605,606)

CONTAINMENT SYSTEMS

DRYWELL AIR LOCKS

LIMITING CONDITION FOR OPERATION

3.6.2.3 Each drywell air lock shall be OPERABLE with:

a. Both doors closed except when the air lock is being used for normal transit entry and exit through the drywell, then at least one air lock door shall be closed, and

b. An overall air lock leakage rate of less than or equal to 2 scf per hour at P_a, 11.5 psig.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2* and 3.

ACTION:

a. With one drywell air lock door inoperable:

1. Maintain at least the OPERABLE air lock door closed and either restore the inoperable air lock door to OPERABLE status within 24 hours or lock the OPERABLE air lock door closed.

2. Operation may then continue provided that the OPERABLE air lock door is verified to be locked closed at least once per 31 days.

3. Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

4. The provisions of Specification 3.0.4 are not applicable.

b. With the drywell air lock inoperable, except as a result of an inoperable air lock door, maintain at least one air lock door closed; restore the inoperable air lock to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

c. With one drywell air lock door inflatable seal system ~~air flask~~ pressure instrumentation channel inoperable, restore the inoperable channel to OPERABLE status within 7 days or verify ~~air flask~~ pressure to be $\geq$ 60 psig at least once per 12 hours.

SEAL

THE ASSOCIATED INFLATABLE SEAL

*See Special Test Exception 3.10.1.

SURVEILLANCE REQUIREMENTS

4.6.2.3 Each drywell air lock shall be demonstrated OPERABLE:

a. Within 8 hours after each closing, except when the air lock is being used for multiple entries, then at least once per 72 hours, by verifying seal leakage rate less than or equal to 2 scf per hour when the gap between the door seals is pressurized to P_a, 11.5 psig.

b. At least once per 6 months by conducting an overall air lock leakage test at P_a, 11.5 psig and by verifying that the overall air lock leakage rate is within its limit.#

c. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.

d. By verifying, ~~the~~ EACH AIRLOCK door inflatable seal system OPERABLE by:

1. Demonstrating EACH OF THE two INFLATABLE seal ~~air flask~~ pressure instrumentation channels PER AIRLOCK DOOR OPERABLE by performance of a:

a) CHANNEL FUNCTIONAL TEST at least once per 31 days, and

b) CHANNEL CALIBRATION at least once per 18 months,

with a low pressure setpoint of $\geq$ 60 psig.

2. At least once per 7 days verifying seal air flask pressure to be greater than or equal to 60 psig.

3. At least once per 18 months, conducting a seal pneumatic system leak test and verifying that system pressure does not decay more than 2 psig from 104.7 ~~psig~~ PSIA within 48 hours.

#The provisions of Specification 4.0.2 are not applicable.

11. (GGNS - 674)

SUBJECT: Technical Specification 4.6.6.3.d.3, page 3/4 6-54.

DISCUSSION: The proposed change to Technical Specification 4.6.6.3.d.3 would add "manual initiation" to the list of SGTS actuation test signals. The proposed change would also indicate that, by LOGIC SYSTEM FUNCTIONAL TEST, the SGTS filter train would be verified to automatically start and that the system isolation dampers open.

JUSTIFICATION: The addition of the manual initiation to the list of system actuation test signals will provide for testing of the SGTS functions with a manual initiation, in addition to the present actuation test signals, to be consistent with section 6.5.3.3 of the FSAR.

The addition of the phrase "by LOGIC SYSTEM FUNCTIONAL TEST" will allow testing of the SGTS such that, in accordance with the definition of a logic system functional test, each of the actuation test signals can be tested through overlapping systems tests. This will enable verification of each entire logic system from the sensor through and including the actuation of the SGTS. In this manner, only one actuation of the filter train and isolation dampers will be necessary to meet the test requirements of 4.6.6.3.d.3.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change clarifies the testing to be performed to verify the operability of the SGTS filter train. Logic system functional testing will allow overlapping systems tests to be performed to satisfy the surveillance requirement, however safety margin will be maintained since all actuation test signals will be tested. 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. The addition of manual initiation to the list of test signals which will be subject to 18 month surveillance is a change that constitutes an additional control not presently included in the Technical Specifications. For these reasons, this proposed change does not constitute a significant hazards consideration.

11.(GGNS-674)

SURVEILLANCE REQUIREMENTS (Continued)

b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the subsystem by:

1. Verifying that the subsystem satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 4000 cfm ± 10%.

2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.

3. Verifying a subsystem flow rate of 4000 cfm ± 10% during system operation when tested in accordance with ANSI N510-1975.

c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.

d. At least once per 18 months by:

1. Performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence for the:

a) LOCA, and

b) Fuel handling accident.

2. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 10.75 inches Water Gauge while operating the filter train at a flow rate of 4000 cfm ± 10%.

3. Verifying by LOGIC SYSTEM FUNCTIONAL TEST that the filter train starts and isolation dampers open on each of the following test signals:

a. Drywell pressure - high,

b. Reactor vessel water level - low low, level 2,

c. Fuel handling area ventilation exhaust radiation - high, and

d. Fuel handling area pool sweep exhaust radiation - high.

e. Manual initiation

4. Verifying that the fan can be manually started.

5. Verifying that the heaters dissipate 50 ± 5.0 kW when tested in accordance with ANSI N510-1975.

12. (GGNS - 100)

SUBJECT: Technical Specification 3.7.1.3, page 3/4 7-4.

DISCUSSION: Technical Specification 3.7.1.3 presently requires operability of two independent SSW cooling tower basins in operational conditions 1, 2, 3, 4, 5, and *. The action statements, however, do not include an action if one SSW cooling tower basin is inoperable in operational condition 4, 5, or *. It is possible, therefore, to be unable to meet the Limiting Condition for Operation and have no action statement to enter. The Action Statements presently do not refer to the action required by Specifications 3.7.1.1 and 3.7.1.2 when both SSW Basins are inoperable in operational conditions 1, 2, and 3.

The Technical Specification should be revised to clarify the limiting condition for operation to indicate those conditions when it is acceptable to have only one SSW basin operable in operational conditions 4, 5, and *.

A change is also proposed to Action a and Action b to indicate the respective operational conditions in which these statements apply. The limiting conditions for operation for the SSW basin in order for the basin to be operable in conjunction with the HPCS service water operability requirements should be revised. These requirements should indicate that only the associated basin water level is required for basin operability associated with the operability of the HPCS service water.

JUSTIFICATION: Technical Specification 3.7.1.3 presently requires both SSW cooling tower basins be operable in operational conditions 4, 5, and *. This represents an unnecessary restriction to activities in those operational conditions where only a single SSW basin is required by Technical Specification 3.7.1.1 and 3.7.1.2 to be operable. The proposed Technical Specification revision clarifies the limiting condition for operation to indicate conditions when it is appropriate for only one SSW basin to be operable in operational conditions 4, 5, and * (i.e., when only one SSW basin is required to be operational by Technical Specification 3.7.1.1 or by 3.7.1.2).

The proposed change to Action a will refer to the action required by Specifications 3.7.1.1 and 3.7.1.2 in operational conditions 4, 5, and *. This will provide consistency in the action required by Specifications 3.7.1.1, 3.7.1.2, and 3.7.1.3.

The proposed change to Action b will refer to the action required by Specification 3.7.1.1. and 3.7.1.2 when both SSW basins are inoperable in operational conditions 1, 2, and 3, and will provide consistency in the action required by these specifications. Without this change, Specification 3.0.3 would be applicable when both SSW basins were inoperable in conditions 1, 2, and 3.

Technical Specification Surveillance Requirement 4.7.1.3 should be revised to indicate that the surveillance is required for the one or the two SSW basins required to be operable per Specification 3.7.1.3. A footnote "#" should be added to the limiting condition for operation to indicate that the basin cooling tower fans are not required to be operable in order for the basin to be considered operable in conjunction with HPCS service water system operability requirements. The operability of the HPCS service water system requires the associated basin water level but does not require operability of either of the associated cooling tower fans.

SIGNIFICANT HAZARDS CONSIDERATION:

Technical Specification 3.7.1.1, 3.7.1.2, and 3.7.1.3 are closely related in that they identify operability restrictions and associated surveillance requirements for the plant Standby Service Water System. Currently, Technical Specification 3.7.1.3 and Surveillance Requirement 4.7.1.3 are inconsistent with these other related items. This change establishes consistency between these specifications in the areas of SSW basin operability, action required in the case of inoperability, surveillance required in determining operability, and operability requirements for the HPCS Service Water System. These changes are purely administrative in nature for achieving consistency throughout the plant Technical Specifications. They constitute no significant hazards considerations as indicated by NRC example (i) of amendments not likely to involve significant hazards considerations.

PLANT SYSTEMS

ULTIMATE HEAT SINK

LIMITING CONDITION FOR OPERATION

3.7.1.3 At least the following ~~Two~~ independent SSW cooling tower basins ~~shall be OPERABLE~~, each with:

a. A minimum basin water level at or above elevation 130'3" Mean Sea Level, USGS datum, equivalent to an indicated level of ≥ 87".

b. Two OPERABLE cooling tower fans.(3) #

shall be OPERABLE:

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, 3, 4, 5 and *.

ACTION:

a. In OPERATIONAL CONDITION 1, 2, ~~or~~ 3, 4, 5 AND * with one SSW cooling tower basin inoperable, declare the associated SSW subsystem inoperable and, if applicable, declare the HPCS service water system inoperable, and take the ACTION required by Specifications 3.7.1.1 and 3.7.1.2, as applicable.

b. In OPERATIONAL CONDITION 1, 2, 3, 4 or 5 with both SSW cooling tower basins inoperable, declare the SSW system and the HPCS service water system inoperable and take the ACTION required by Specifications 3.7.1.1 and 3.7.1.2.

c. In Operational Condition * with both SSW cooling tower basins inoperable, declare the SSW system inoperable and take the ACTION required by Specification 3.7.1.1. The provisions of Specification 3.0.3 are not applicable.

a. In OPERATIONAL CONDITION 1, 2, and 3, two basins.
b. In OPERATIONAL CONDITION 4, 5, and *, the basin associated with systems and components required OPERABLE by Specifications 3.7.1.1 and 3.7.1.2.

SURVEILLANCE REQUIREMENTS

4.7.1.3 At least the above required ~~Two~~ SSW cooling tower basins shall be determined OPERABLE at least once per:

a. 24 hours by verifying basin water level to be greater than or equal to 87".

b. 31 days by starting each SSW cooling tower fan from the control room and operating the fan for at least 15 minutes.

c. 18 months by verifying that each SSW cooling tower fan starts automatically when the associated SSW subsystem is started.

* When handling irradiated fuel in the Auxiliary Building or Enclosure Building.

The basin cooling tower fans are not required to be OPERABLE for HPCS service water system OPERABILITY.

13. (GGNS - 699)

SUBJECT: Technical Specification 4.7.2.d.2, page 3/4 7-6.

DISCUSSION: The proposed change to Technical Specification 4.7.2.d.2 would add "manual initiation" to the list of Control Room emergency filtration system actuation test signals. The proposed change would also indicate that, by LOGIC SYSTEM FUNCTIONAL TEST, the Control Room system would be verified to automatically switch to the isolation mode and that the isolation valves close within 4 seconds.

JUSTIFICATION: The addition of the manual initiation to the list of system actuation test signals will provide for testing of the system functions with a manual initiation, in addition to the present actuation test signals, to be consistent with section 9.4.1.3 of the FSAR.

The addition of the phrase "by LOGIC SYSTEM FUNCTIONAL TEST" will allow testing of the Control Room emergency filtration system such that, in accordance with the definition of a logic system functional test, each of the actuation test signals can be tested through overlapping system steps. This will enable verification of each entire logic system from the sensor through and including the actuation of the Control Room system. In this manner, only one actuation of the Control Room emergency filtration system and isolation valves will be required to meet the test requirements of 4.7.2.d.2.

SIGNIFICANT HAZARDS CONSIDERATION:

The proposed change clarifies the testing to be performed to verify the operability of the Control Room Emergency Filtration System. Logic system functional testing will allow overlapping systems tests to be performed to satisfy the surveillance requirement, however, safety margins will be maintained since all actuation test signals will be tested. 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. The addition of manual initiation to the list of test signals which will be subject to 18 month surveillance is a change that constitutes an additional control not presently included in the Technical Specifications. For these reasons, this proposed 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.

13. (GGNS-699)

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the subsystem satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c and C.5.d of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 4000 cfm ± 10%.

2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.

3. Verifying a subsystem flow rate of 4000 cfm ± 10% during subsystem operation when tested in accordance with ANSI N510-1975.

PCR 83/05

c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Positon C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978.

d. At least once per 18 months by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 7.2 inches Water Gauge while operating the subsystem at a flow rate of 4000 cfm ± 10%.

2. Verifying, by LOGIC SYSTEM FUNCTIONAL TEST that on each of the below isolation mode actuation test signals, the subsystem automatically switches to the isolation mode of operation and the isolation valves close within 4 seconds:

a) High radiation in the outside air intake duct,
b) High chlorine concentration in the outside air intake duct,
c) High drywell pressure, and
d) Low reactor water level.
e) Manual initiation

3. Verifying that the heaters dissipate 20.7 ± 2.1 kW when tested in accordance with ANSI N510-1975.

e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 4000 cfm ± 10%.

f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 4000 cfm ± 10%.

14. (GGNS - 651)

SUBJECT: Technical Specification Table 3.7.4-2, page 3/4 7-16.

DISCUSSION: Technical Specification Table 3.7.4-2 provides a listing of safety related mechanical snubbers. Due to additional snubbers being added to the recirculation system, this table is no longer accurate. Two (2) additional snubbers (AQ1B33G35501 and AQ1B33G318R01) were added to 3/4" DCB-24 sensing lines of the Recirculation System (B33). Design Change Request (DCR) 82/784 identified these lines as experiencing excessive vibration during nonnuclear startup.

JUSTIFICATION: The note (*) on Technical Specification Table 3.7.4-1 indicates that snubbers may be added to safety related systems without prior Licensee Amendment to Table 3.7.4-1 provided that a revision to Table 3.7.4-1 is included with the next License Amendment request. This note is interpreted to also apply to Table 3.7.4-2 for safety related mechanical snubbers and should for clarification be added to page 3/4 7-16.

SIGNIFICANT HAZARDS CONSIDERATION:

This proposed change is purely administrative in nature as it adds a footnote inadvertently omitted from the bottom of the table. The footnote is is in accordance with the Standard Technical Specifications. This change conforms to NRC example (i) of amendments not considered to involve significant hazards considerations. Therefore, this change does not constitute a significant hazards consideration.

TABLE 3.7.4-2

SAFETY RELATED MECHANICAL SNUBBERS*

SNUBBER NO.	AREA	ELEVATION
a. RECIRCULATION SYSTEM		
Q1B33G023R01	11	117
Q1B33G023R01	11	117
Q1B33G024R01	11	102
Q1B33G024R02	11	102
Q1B33G024R02	11	102
Q1B33G024R05	11	101
Q1B33G105C01	11	101
Q1B33G105R01	11	101
Q1B33G105R02	11	101
Q1B33G105R02	11	101
Q1B33G108C01	11	101
Q1B33G108R01	11	101
Q1B33G108R01	11	101
Q1B33G108R01	11	101
Q1B33G108R02	11	101
Q1B33G108R02	11	101

SNUBBER NO.	AREA	ELEVATION
RECIRCULATION SYSTEM (Continued)		
Q1B33G112R02	11	101
Q1B33G124R01	11	122
Q1B33G128C01	11	121
Q1B33G128C01	11	121
Q1B33G129C01	11	121
Q1B33G262R02	11	103
Q1B33G265C01	11	102
Q1B33G265R04	11	107
Q1B33G265R05	11	112
Q1B33G322R01	11	112
Q1B33G322R01	11	112
Q1B33G331R02	11	111
Q1B33G337R02	11	109
Q1B33G339R01	11	111
Q1B33G346R01	11	105
Q1B33G355R01	11	100
Q1B33G318R01	11	100

* Snubbers may be added to safety related systems without prior License Amendment to Table 3.7.4-2 provided that a revision to Table 3.7.4-2 is included with the next License Amendment request

14. (GGNS-651)

3/4 7-16

15. (GGNS - 242)

SUBJECT: Technical Specification 4.7.7.2; page 3/4 7-41

DISCUSSION: The Surveillance Requirements for fire doors contained in Technical Specification Section 4.7.7.2 should be revised to agree with the requirements contained in Subsection N, Section III, of Appendix R to 10CFR Part 50. The Surveillance Requirements are being revised to clarify that only one of the verifications of operability per 4.7.7.2.a thru d is required for each fire door and to clarify the requirement for semiannual surveillance of each fire door automatic hold-open, release, and closing mechanism and latch in Specification 4.7.7.3.

JUSTIFICATION: The proposed changes to the Technical Specification Surveillance Requirements assure that the requirements in Appendix R to 10CFR Part 50 relating to surveillance of fire doors are correctly implemented through one of the surveillance requirements of 4.7.7.2 and through 4.7.7.3. The requirement in 4.7.7.3 has been separated to assure that the fire door hold-open, release, and closing mechanisms and latches are verified to be operable semiannually for each fire door. This requirement is also in accordance with Subsection N, Section III of Appendix R to 10 CFR Part 50.

SIGNIFICANT HAZARDS CONSIDERATION:

This proposed change documents GGNS compliance with 10CFR50 Appendix R, Section III, Subsection N with respect to surveillance of fire doors. GGNS compliance is documented in FSAR Table 9A-4. 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 an accident previously evaluated. Since the revised Technical Specification is in complete agreement with the appropriate requirements of 10CFR50 Appendix R, no significant reduction in the margin of safety is involved. For these reasons, this proposed change does not constitute a significant hazards consideration.

SURVEILLANCE REQUIREMENTS (Continued)

4.7.7.2 Each of the above required fire doors shall be verified OPERABLE by one of the following:

a. Verifying the position of each closed fire door at least once per 24 hours.

b. Verifying that doors with automatic hold-open and release mechanisms are free of obstructions at least once per 24 hours.

c. Verifying the position of each locked closed fire door at least once per 7 days.

d. Verifying OPERABILITY of the fire door supervision system by performing a CHANNEL FUNCTIONAL TEST at least once per 31 days.

~~e. Inspecting the automatic hold-open, release and closing mechanism and latches at least once per 6 months.~~

4.7.7.3 Each of the above required FIRE doors shall be inspected ONCE per 6 months to verify that automatic hold-open, release, and closing mechanisms and latches are OPERABLE.

16. (CGNS - 479, 480, 486)

SUBJECT: Technical Specification 4.8.4.3.b, page 3/4 8-46.

DISCUSSION: Technical Specification 4.8.4.3.b establishes the setpoints and tolerances for the Reactor Protection System (RPS) electrical protection assembly (EPA) over-voltage, under-voltage, and under- frequency protective instrumentation. The basis of these setpoints is 110% of nominal for over-voltage, 97.5% of nominal for under-voltage, and 95% of nominal for under-frequency. Nominal is defined as 120 VAC at 60 hertz. With the under-voltage setpoint of 117 VAC and a 12 VAC voltage drop from the RPS bus to the scram solenoids, a minimum voltage of 105 VAC is provided at the scram solenoids for proper operation of these devices. Although the setpoints stated in the Technical Specification are correct, the associated tolerances are incorrect. The setpoint tolerances should be changed to +0, -3.3 VAC for over-voltage; +2.9, -0 VAC for under-voltage, and +1.1, -0 Hz for under-frequency to be consistent with the equipment design specification.

JUSTIFICATION: FSAR subsection 8.3.1.1.5.2 presents the bases of the trip setpoints. An FSAR change will be submitted to address the effect of the line voltage drop to the scram discharge coils and to reflect the EPA protective circuitry setpoint tolerances.

The General Electric design specification provides trip setpoint tolerances as percentages of each specific setpoint for the over-voltage, under-voltage, and under-frequency protective instrumentation. These percentages were included in the present Technical Specifications as values (i.e., VAC or Hz) rather than percentages. The proposed change incorporates the correct tolerances in VAC or Hz based on the specification percentages.

SIGNIFICANT HAZARDS CONSIDERATION:

This proposed change is a correction to the setpoint tolerances for the RPS EPA protective circuitry to agree with the equipment design specification. 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 an accident from any accident previously evaluated. Since the revised tolerances are changed in the conservative direction, no reduction in the margin for safety is involved. For these reasons, this proposed changes does not constitute a significant hazards consideration.

16. (GGNS-479, 480, 486)

ELECTRICAL POWER SYSTEMS

REACTOR PROTECTION SYSTEM ELECTRIC POWER MONITORING

LIMITING CONDITION FOR OPERATION

3.8.4.3 Two RPS electric power monitoring assemblies for each inservice RPS MG set or alternate power supply shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

a. With one RPS electric power monitoring assembly for an inservice RPS MG set or alternate power supply inoperable, restore the inoperable power monitoring system to OPERABLE status within 72 hours or remove the associated RPS MG set or alternate power supply from service.

b. With both RPS electric power monitoring assemblies for an inservice RPS MG set or alternate power supply inoperable, restore at least one electric power monitoring assembly to OPERABLE status within 30 minutes or remove the associated RPS MG set or alternate power supply from service.

SURVEILLANCE REQUIREMENTS

4.8.4.3 The above specified RPS electric power monitoring assemblies shall be determined OPERABLE:

a. At least once per six months by performance of a CHANNEL FUNCTIONAL TEST, and

b. At least once per 18 months by demonstrating the OPERABILITY of over-voltage, under-voltage and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints:

1. Over-voltage 132 + 0, -~~2.5~~ 3.3 VAC,
2. Under-voltage 117 +~~2.5~~ 2.9, - 0 VAC, and
3. Under-frequency 57 +~~2.0~~ 1.1, - 0 Hz.

17. (GGNS - 418)

SUBJECT: Technical Specification 4.9.6, page 3/4 9-8

DISCUSSION: The primary fuel handling equipment at GGNS consists of a Refueling Platform and an Auxiliary Platform in the primary containment and a Fuel Handling Platform in the fuel handling area of the Auxiliary Building which are utilized in handling fuel assemblies and control rods. Technical Specification 3/4.9.6 provides specifications for only the Refueling Platform and does not address other equipment that may be used during fuel assembly and control rod handling operations.

The present GGNS Technical Specifications are based on the guidance presented in NUREG-0123, Standard Technical Specifications for General Electric Boiling Water Reactors, which is not directly applicable to the GGNS design. Therefore, the present Technical Specification 3/4.9.6 should be deleted and a new section 3/4.9.6 added which conforms to the intent of the regulatory guidance and accurately reflects the GGNS design.

JUSTIFICATION: The GGNS design includes handling equipment in addition to the Refueling Platform that is used for handling fuel assemblies and control rods. The proposed change includes Technical Specifications for this additional equipment, i.e., for the Auxiliary Platform and the Fuel Handling Platform.

The proposed change maintains the applicable technical requirements of the existing specification for the Refueling Platform. However, the applicability has been expanded to include fuel handling operations within both the primary containment and the secondary containment. This assures the proper operation of handling equipment in each fuel handling area. The specification title has been changed to "Refueling Equipment" with subsections entitled "Refueling Platform", "Auxiliary Platform", and "Fuel Handling Platform" in order to identify those requirements pertaining to the specific equipment in use.

The proposed change includes the Limiting Conditions for Operation and associated Action requirements as specified in NUREG-0123. However, only the main hoist on the Refueling Platform and on the Fuel Handling Platform may be used to handle irradiated fuel assemblies as stated in FSAR subsection 9.1.4.1.

The Surveillance Requirements included in the proposed change met the intent of the guidance specified in NUREG-0123. However, changes have been incorporated in order to (1) conform to the GGNS design (2) eliminate confusion resulting from nomenclature differences and (3) organize the requirements according to the operation being performed and the equipment in use. FSAR subsection 9.1.4 provides a description of the fuel

handling equipment and capabilities. FSAR subsection 7.6.1.1 provides a description of the refueling interlocks. However, due to several design changes which have been implemented, this section of the FSAR will be updated and revised at a later date. These changes included (1) eliminating the refueling interlocks associated with the Refueling Platform auxiliary hoists since these hoists are not used for handling irradiated fuel assemblies, and (2) providing separate and redundant refueling interlock circuits for the Refueling Platform main hoist. Specific changes to the Surveillance Requirements are proposed as follows:

1. The words "frame mounted and monorail" referring to the Refueling Platform hoists have been changed to "auxiliary". (The Fuel Handling Platform has one auxiliary hoist.)

   FSAR section 9.1.4 and GGNS specifications refer to these hoists as auxiliary hoists.

2. Technical Specification limits, with the exception of the slack cable cutoff, have been changed to allowable values rather than setpoints plus tolerance.

   This is consistent with the philosophy used in other Technical Specifications providing limits. Where unacceptable consequences could result from exceeding only an upper or only a lower limit, allowable values are specified; however, where unacceptable consequences could result from exceeding either an upper or a lower limit, setpoints with tolerances are specified.

3. Demonstration of the uptravel mechanical stop function on the Refueling Platform auxiliary hoists has been deleted.

   The intent of this specification was to ensure irradiated fuel would be adequately shielded during handling operations; however, as described in FSAR subsection 9.1.4.1, the auxiliary hoists are not used in the handling of irradiated fuel assemblies. The proposed change specifically prohibits the use of auxiliary hoists for this purpose; therefore, this specification is not required.

4. The word "load" in relation to the main hoist on the Refueling Platform (and on the Fuel Handling Platform) has been changed to "total cable load".

   As discussed in FSAR subsection 9.1.4.2.7.1, the main hoists utilize a telescoping mast. As the mast is extended the load is transferred from the cable to the platform; therefore, the load on the hoist varies depending on extension length. The design load setpoints are based on cable load and not the load on the grapple. This change will ensure there will be no confusion as to the definition of load.

5. The designation "loaded interlock" in the present GGNS Technical Specification 4.9.6.f has been corrected to identify it as the "grapple engaged loaded interlock". The "grapple engaged loaded interlock" applies to both the Refueling Platform main hoist (allowable value of 535 pounds) and the Fuel Handling Platform main hoist (allowable value of 400 pounds).

   The "grapple engaged loaded interlock" circuitry ensures a fuel assembly can not be raised unless the grapple hooks are full closed.

*6. The designation "redundant loaded interlock" in the present GGNS Technical Specification 4.9.6.g has been corrected to identify both the primary and its redundant interlock as the "primary and redundant fuel load interlocks" on the Refueling Platform main hoist. This change also clarifies that this interlock is different from the interlock referred to in the present GGNS Technical Specification 4.9.6.f.

   The Refueling Platform "primary and redundant fuel load interlocks" (allowable value of 600 pounds) provide input to the refueling interlock circuitry.

7. The words "overload cutoff" in relation to the main hoist on the Refueling Platform (and on the Fuel Handling Platform) has been changed to "jam cutoff".

   The installed annunciator system and equipment specifications refer to this function as the jam cutoff.

*8. The specification for the downtravel cutoff on the Refueling Platform main hoist has been changed to specifically identify the reference point as the bottom of the grapple and the limit has been changed to 3.5 ± 0.5 inches.

   The downtravel cutoff for the Refueling Platform main hoist is based upon the bottom of the grapple since the purpose of this limit is to prevent striking the fuel bundle with the grapple. The limit is specified as a setpoint with tolerance since exceeding the lower value could result in striking the top of the fuel bundle and exceeding the upper value could result in improper engagement. The value of 3.5 ± 0.5 inches has been verified by reviewing "as built" drawings.

   The Surveillance Requirements prepared for the Auxiliary Platform and the Fuel Handling Platform are based on the guidance of NUREG-0123, where applicable, and are

* These requirements pertain to Refueling Platform operations in or over the reactor pressure vessel only.

structured in accordance with the changes discussed above. Allowable values in relation to the Fuel Handling Platform main hoist are slightly lower than the corresponding values for the Refueling Platform based on the lower weight of the Fuel Handling Platform telescoping mast. Additional specifications pertaining to the Fuel Handling Platform auxiliary hoist are necessary since this hoist is designed to be capable of handling new fuel assemblies. These specifications assure the Fuel Handling Platform auxiliary hoist will not be utilized for handling irradiated fuel assemblies.

Finally, the Technical Specification basis has been corrected and revised to incorporate the additional specifications that are proposed.

SIGNIFICANT HAZARDS CONSIDERATION:

Changes which will result from this request fall into the following categories:

1. Administrative changes to establish consistency with plant terminology and nomenclature.

2. Modifications to make the Technical Specifications consistent with actual plant refueling equipment design as described in FSAR Section 9.1.4 and 7.6.1.1.

3. Changes to establish consistency throughout the Technical Specifications in the manner single limit parameters are presented (i.e., allowable values as opposed to setpoints and tolerances).

4. Changes which incorporate additional plant features which should be covered by appropriate Technical Specifications. These changes constitute additional restrictions, limitations and controls not presently included in the Technical Specifications.

The changes do not involve a significant increase in the probability or consequences of an accident previously evaluated nor do they create the possibility of a new or different kind of accident from any accident previously evaluated. No significant reduction in safety margin results from these changes. As they conform to NRC examples (i) and (ii) of amendments considered not likely to involve significant hazards considerations, they do not constitute a significant hazards consideration.

REFUELING OPERATIONS

3/4.9.6 REFUELING PLATFORM

LIMITING CONDITION FOR OPERATION

3.9.6 The refueling platform shall be OPERABLE and used for handling fuel assemblies or control rods within the reactor pressure vessel.

APPLICABILITY: During handling of fuel assemblies or control rods within the reactor pressure vessel.

ACTION:

With the requirements for refueling platform OPERABILITY not satisfied, suspend use of any inoperable refueling platform equipment from operations involving the handling of control rods and fuel assemblies within the reactor pressure vessel after placing the load in a safe condition.

SURVEILLANCE REQUIREMENTS

4.9.6 Each refueling platform crane or hoist used for handling of control rods or fuel assemblies within the reactor pressure vessel shall be demonstrated OPERABLE within 7 days prior to the start of such operations with that crane or hoist by:

a. Demonstrating operation of the overload cutoff on the main hoist when the load exceeds 1200 ± 50 pounds.

b. Demonstrating operation of the overload cutoff on the frame mounted and monorail hoists when the load exceeds 500 ± 50 pounds.

c. Demonstrating operation of the uptravel mechanical stop on the frame mounted and monorail hoists when uptravel brings the top of a fuel assembly to 8 feet below the normal fuel storage pool water level.

d. Demonstrating operation of the downtravel mechanical cutoff on the main hoist when grapple hook down travel reaches 4 inches below fuel assembly handle.

e. Demonstrating operation of the slack cable cutoff on the main hoist when the load is less than 50 ± 10 pounds.

f. Demonstrating operation of the loaded interlock on the main hoist when the load exceeds 485 ± 50 pounds.

g. Demonstrating operation of the redundant loaded interlock on the main hoist when the load exceeds 550 ± 50 pounds.

REFUELING OPERATIONS

3/4.9.6 REFUELING EQUIPMENT

REFUELING PLATFORM

LIMITING CONDITION FOR OPERATION

3.9.6.1 The refueling platform shall be OPERABLE and only the main hoist shall be used for handling fuel assemblies.

APPLICABILITY: During handling of fuel assemblies or control rods in the primary containment with the refueling platform.

ACTION:

With the requirements for refueling platform OPERABILITY not satisfied, suspend use of any inoperable refueling platform equipment from operations involving the handling of fuel assemblies or control rods after placing the load in a safe condition.

SURVEILLANCE REQUIREMENTS

4.9.6.1 Each refueling platform hoist to be used for handling fuel assemblies or control rods shall be demonstrated OPERABLE within 7 days prior to the handling of fuel assemblies or control rods:

a. In the containment fuel pool, reactor cavity or reactor pressure vessel by:

1. Demonstrating operation of the slack cable cutoff on the main hoist when the total cable load is 50± 10 pounds.

2. Demonstrating operation of the grapple engaged loaded interlock on the main hoist before the total cable load exceeds 535 pounds.

3. Demonstrating operation of the jam cutoff on the main hoist before the total cable load exceeds 1250 pounds.

4. Demonstrating operation of the primary and redundant overload cutoff on the auxiliary hoists before the load exceeds 550 pounds.

b. In or over the reactor pressure vessel by:

1. Demonstrating operation of the downtravel cutoff on the main hoist when the bottom of the grapple is 3.5 ± 0.5 inches below the top of the fuel assembly handles in the reactor core.

2. Demonstrating operation of the primary and redundant fuel load interlocks on the main hoist before the total cable load exceeds 600 pounds.

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REFUELING OPERATIONS

3/4.9.6 REFUELING EQUIPMENT

AUXILIARY PLATFORM

LIMITING CONDITION FOR OPERATION

3.6.9.2 The auxiliary platform shall be OPERABLE.

APPLICABILITY: During handling of control rods with the auxiliary platform.

ACTION:

With the requirements for auxiliary platform OPERABILITY not satisfied, suspend use of the auxiliary platform after placing the load in a safe condition.

SURVEILLANCE REQUIREMENTS

4.9.6.2 The auxiliary platform hoist shall be demonstrated OPERABLE within 7 days prior to the handling of control rods by demonstrating operation of the overload cutoff before the load exceeds 550 pounds.

REFUELING OPERATIONS

3/4.9.6 REFUELING EQUIPMENT

FUEL HANDLING PLATFORM

LIMITING CONDITION FOR OPERATION

3.9.6.3 The fuel handling platform shall be OPERABLE and only the main hoist shall be used to move irradiated fuel.

APPLICABILITY: During handling of fuel assemblies or control rods in the auxiliary building with the fuel handling platform.

ACTION:

With the requirements for fuel handling platform OPERABILITY not satisfied, suspend use of any inoperable fuel handling platform equipment from operations involving the handling of fuel assemblies or control rods after placing the load in a safe condition.

SURVEILLANCE REQUIREMENTS

4.9.6.3.1 Each fuel handling platform hoist to be used for handling fuel assemblies or control rods shall be demonstrated OPERABLE within 7 days prior to the handling of fuel assemblies or control rods by:

a. Demonstrating operation on the slack cable cutoff on the main hoist when the total cable load is 50±10 pounds.

b. Demonstrating operation of the grapple engaged loaded interlock on the main hoist before the total cable load exceeds 400 pounds.

c. Demonstrating operation of the jam cutoff on the main hoist before the total cable load exceeds 1150 pounds.

d. Demonstrating operation of the primary and redundant overload cutoff on the auxiliary hoist before the load exceeds 550 pounds with the load override switch at the 500 pound position.

e. Demonstrating operation of the primary and redundant overload cutoff on the auxiliary hoist before the load exceeds 1050 pounds with the load override switch at the 1000 pound position.

4.9.6.3.2 The auxiliary hoist load override switch shall be verified to be in the 500 pound position within 2 hours and at least once per 12 hours during hoist operation, except when engaged in new fuel movement in which case the switch may be in the 1000 pound position.

3/4.9.6 REFUELING EQUIPMENT

The OPERABILITY requirements ensure (1) only the refueling platform main hoist will be used for handling fuel assemblies; (2) only the fuel handling platform main hoist will be used for handling irradiated fuel assemblies; (3) each platform hoist has sufficient load capacity for handling fuel assemblies and/or control rods as applicable; (4) the reactor internals are protected from excessive lifting or impact force in the event they are inadvertently engaged or impacted during lifting or lowering operations; (5) the load sensing devices will provide the hoist fuel loaded interlock signals; and, (6) the probability of a fuel handling accident is minimized.