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February 15, 2001

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

Subject: Grand Gulf Nuclear Station
Docket No. 50-416
License No. NPF-29
Technical Specification Bases Update to the NRC for Period
September 15, 2000 thru February 15, 2001

GNRO-2001/00013

Gentlemen:

Pursuant to Grand Gulf Nuclear Station (GGNS) Technical Specification 5.5.11, Entergy Operations, Inc. hereby submits an update of all changes made to GGNS Technical Specification Bases since the last submittal (GNRO-2000/00065 letter dated September 18, 2000 to the NRC from GGNS). This submittal brings the Technical Bases up-to-date for the period September 15, 2000 through February 15, 2001. This update is consistent with update frequency listed in 10CFR50.71(e). This letter does not contain any commitments.

Should you have any questions, please contact Mike Larson at (601) 437-6685.

Yours truly,

CAB/MJL
attachment: GGNS Technical Specification Bases Revised Pages
cc: (See Next Page)

February 15 2001
GNRO-2001/00013

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February 15 2001
GNRO-2001/00013

ATTACHMENT TO GNRO-2001/00013

GGNS Gulf Technical Specification Bases Revised Pages for Period September 15, 2000 Through February 15, 2001

LDC#	BASES PAGES AFFECTED	TOPIC of CHANGE
99069	B 3.6-100, 3.6-101, 3.7-15, 3.7-16,	Changes associated with Technical Specification Amendment 144
00082	B 3.9.-25	Adds information to the Technical Specification Bases in regard to RHR suction line ups and fuel pool cooling
00081	B 3.6-101, 3.6-94	Corrects an error in the Technical Specification Bases - SR listed as 3.3.6.2.5 should have been 3.3.6.2.6

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.4.2.1 (continued)

relatively easy, the 31 day Frequency was chosen to provide added assurance that the SCIVs are in the correct positions.

Two Notes have been added to this SR. The first Note applies to valves, dampers, rupture disks, and blind flanges located in high radiation areas and allows them to be verified by use of administrative controls. Allowing verification by administrative controls is considered acceptable, since access to these areas is typically restricted during MODES 1, 2, and 3 for ALARA reasons. Therefore, the probability of misalignment of these SCIVs, once they have been verified to be in the proper position, is low.

A second Note has been included to clarify that SCIVs that are open under administrative controls are not required to meet the SR during the time the SCIVs are open.

SR 3.6.4.2.2

Verifying the isolation time of each power operated and each automatic SCIV is within limits is required to demonstrate OPERABILITY. The isolation time test ensures that the SCIV will isolate in a time period less than or equal to that assumed in the safety analyses. Generally, SCIVs must close within 120 seconds to support the functioning of the Standby Gas Treatment System. SCIVs may have analytical closure times based on a function other than secondary containment isolation, in which case the more restrictive time applies. The Frequency of this SR is in accordance with the Inservice Testing Program.

SR 3.6.4.2.3

Verifying that each automatic SCIV closes on a secondary containment isolation signal is required to prevent leakage of radioactive material from secondary containment following a DBA or other accidents. This SR ensures that each automatic SCIV will actuate to the isolation position on a secondary containment isolation signal. The LOGIC SYSTEM FUNCTIONAL TEST in SR 3.3.6.2.6 overlaps this SR to provide complete testing of the safety function. The 18 month

(continued)

BASES

ACTIONS

E.1 and E.2 (continued)

suspended. Suspension of these activities shall not preclude completion of movement of a component to a safe position. Also, if applicable, actions must be immediately initiated to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Action must continue until OPDRVs are suspended.

SURVEILLANCE REQUIREMENTS

SR 3.6.4.3.1

Operating each SGT subsystem from the control room for ≥ 10 continuous hours ensures that both subsystems are OPERABLE and that all associated controls are functioning properly. It also ensures that blockage, fan or motor failure, or excessive vibration can be detected for corrective action. Operation with the heaters on (automatic heater cycling to maintain temperature) for ≥ 10 continuous hours every 31 days eliminates moisture on the adsorbers and HEPA filters. The 31 day Frequency was developed in consideration of the known reliability of fan motors and controls and the redundancy available in the system.

SR 3.6.4.3.2

This SR verifies that the required SGT filter testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specified test frequencies and additional information are discussed in detail in the VFTP.

SR 3.6.4.3.3

This SR requires verification that each SGT subsystem starts upon receipt of an actual or simulated initiation signal.

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.4.3.3 (continued)

The LOGIC SYSTEM FUNCTIONAL TEST in SR 3.3.6.2.6 overlaps this SR to provide complete testing of the safety function. While this Surveillance can be performed with the reactor at power, operating experience has shown these components usually pass the Surveillance when performed at the 18 month Frequency, which is based on the refueling cycle. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

REFERENCES

1. 10 CFR 50, Appendix A, GDC 41.

2. UFSAR, Section 6.5.3.

BASES

ACTIONS

E.1, E.2, and E.3 (continued)

OPDRVs, with two CRFA subsystems inoperable, action must be taken immediately to suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk.

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the primary and secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. If applicable, actions must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

SURVEILLANCE REQUIREMENTS

SR 3.7.3.1

This SR verifies that a subsystem in a standby mode starts from the control room on demand and continues to operate. Standby systems should be checked periodically to ensure that they start and function properly. As the environmental and normal operating conditions of this system are not severe, testing each subsystem once every month provides an adequate check on this system. Monthly heater operation dries out any moisture accumulated in the charcoal from humidity in the ambient air. Systems with heaters must be operated for $\geq$ 10 continuous hours with the heaters energized. Furthermore, the 31 day Frequency is based on the known reliability of the equipment and the two subsystem redundancy available.

SR 3.7.3.2

This SR verifies that the required CRFA testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency,

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BASES

SURVEILLANCE REQUIREMENTS

SR 3.7.3.2 (continued)

minimum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

SR 3.7.3.3

This SR verifies that each CRFA subsystem starts and operates and that the isolation valves close in $\leq$ 4 seconds on an actual or simulated initiation signal. The LOGIC SYSTEM FUNCTIONAL TEST in SR 3.3.7.1.6 overlaps this SR to provide complete testing of the safety function. While this Surveillance can be performed with the reactor at power, operating experience has shown these components usually pass the Surveillance when performed at the 18 month Frequency, which is based on the refueling cycle. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

REFERENCES

1. UFSAR, Section 6.5.1.
2. UFSAR, Section 9.4.1.
3. UFSAR, Chapter 6.
4. UFSAR, Chapter 15.
5. Deleted
6. Engineering Evaluation Request 95/6213, Engineering Evaluation Request Response Partial Response dated 12/18/95.

B 3.9 REFUELING OPERATIONS

B 3.9.8 Residual Heat Removal (RHR) – High Water Level

BASES

BACKGROUND

The purpose of the RHR System in MODE 5 is to remove decay heat and sensible heat from the reactor coolant, as required by GDC 34. Each of the two shutdown cooling loops of the RHR System is designed to maintain the reactor coolant bulk average temperature ≤ 140°F. Each loop consists of one motor driven pump, two heat exchangers, and associated piping and valves. Both loops have a common suction from the same recirculation loop or suction can be aligned from the fuel pool. Each pump discharges the reactor coolant, after it has been cooled by circulation through the respective heat exchangers, to the reactor via separate feedwater lines or to the upper containment pool via a common single flow distribution sparger, or to the reactor via the low pressure coolant injection path. The RHR heat exchangers transfer heat to the Standby Service Water System. The RHR shutdown cooling mode is manually controlled.

An Alternate Decay Heat Removal System (ADHRS) is also available to provide the required decay heat removal. The ADHRS provides a single subsystem consisting of two motor driven pumps, two heat exchangers, and associated piping and valves. The system utilizes the common RHR shutdown cooling suction line and some fuel pool cooling and cleanup piping. The system is not safety-related and cannot be powered from an onsite diesel generator. The ADHRS heat exchangers transfer heat to the Plant Service Water System (PSW). The ADHRS is manually controlled and isolated from the common portions of the other systems.

In addition to the above subsystems, the volume of water above the reactor pressure vessel (RPV) flange provides a heat sink for decay heat removal.

APPLICABLE SAFETY ANALYSES

With the unit in MODE 5, neither the RHR System nor the ADHRS is required to mitigate any events or accidents evaluated in the safety analyses. The RHR System, or the ADHRS, is required for removing decay heat to maintain the temperature of the reactor coolant.

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