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November 20, 2003

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

Attention: Document Control Desk

Subject: Technical Specification Bases Update to the NRC for Period Dated
November 20, 2003

Grand Gulf Nuclear Station
Docket No. 50-416
License No. NPF-29

GNRO-2003/00064

Ladies and 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-2003/00035 letter dated June 6, 2003 to the NRC from GGNS). 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 Rita Jackson at (601) 437-2149.

Yours truly,

A handwritten signature in black ink, appearing to be "CAB/RRJ".

CAB/RRJ
attachment:
cc:

GGNS Technical Specification Bases Revised Pages
(See Next Page)

A001

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cc:

Hoeg	T. L.	(GGNS Senior Resident)	(w/a)
Levanway	D. E.	(Wise Carter)	(w/a)
Reynolds	N. S.		(w/a)
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Thomas	H. L.		(w/o)

U.S. Nuclear Regulatory Commission ATTN: Mr. Bruce Mallett (w/2) 611 Ryan Plaza Drive, Suite 400 Arlington, TX 76011-4005	ALL LETTERS
U.S. Nuclear Regulatory Commission ATTN: Mr. Bhalchandra Vaidya, NRR/DLPM (w/2) ATTN: ADDRESSEE ONLY ATTN: Courier Delivery Only Mail Stop OWFN/7D-1 11555 Rockville Pike Rockville, MD 20852-2378	ALL LETTERS – COURIER DELIVERY (FEDEX, ETC.) ADDRESS ONLY - ****DO NOT USE FOR U.S. POSTAL SERVICE ADDRESS*****

ATTACHMENT to GNRO-2003/00064

Grand Gulf Technical Specification Bases Revised Pages

dated

November 20, 2003

LDC#	BASES PAGES AFFECTED	TOPIC of CHANGE
03067	B 3.8-58, B 3.8-59	Technical Specification Amendment 159 implementation

BASES

SURVEILLANCE
REQUIREMENTS
(continued)

SR 3.8.4.7

A battery service test is a special test of the battery's capability, as found, to satisfy the design requirements (battery duty cycle) of the DC electrical power system. The discharge rate and test length (4 hours for Division 1 and Division 2 and 2 hours for Division 3) correspond to the design duty cycle requirements as specified in Reference 4.

The Surveillance Frequency of 18 months is consistent with the recommendations of Regulatory Guide 1.32 (Ref. 9) and Regulatory Guide 1.129 (Ref. 10), which state that the battery service test should be performed during refueling operations or at some other outage, with intervals between tests not to exceed 18 months.

This SR is modified by two Notes. Note 1 allows the once per 60 months performance of SR 3.8.4.8 in lieu of SR 3.8.4.7. This substitution is acceptable because SR 3.8.4.8 represents a more severe test of battery capacity than SR 3.8.4.7. The reason for Note 2 is that performing the Surveillance would remove a required DC electrical power subsystem from service, perturb the electrical distribution system, and challenge safety systems. The Division 3 test may be performed in MODE 1, 2, or 3 in conjunction with HPCS system outages. Credit may be taken for unplanned events that satisfy the Surveillance.

SR 3.8.4.8

A battery performance test is a test of constant current capacity of a battery, normally done in the as found condition, after having been in service, to detect any change in the capacity determined by the acceptance test. The test is intended to determine overall battery degradation due to age and usage.

The acceptance criteria for this Surveillance is consistent with IEEE-450 (Ref. 8) and IEEE-485 (Ref. 11). These references recommend that the battery be replaced if its capacity is below 80% of the manufacturer's rating. A capacity of 80% shows that the battery rate of deterioration is increasing, even if there is ample capacity to meet the load requirements.

(continued)

BASES

SURVEILLANCE
REQUIREMENTS

SR 3.8.4.8 (continued)

The Surveillance Frequency for this test is normally 60 months. If the battery shows degradation, or if the battery has reached 85% of its expected life and capacity is < 100% of the manufacturer's rating, the Surveillance Frequency is reduced to 12 months. However, if the battery shows no degradation but has reached 85% of its expected life, the Surveillance Frequency is only reduced to 24 months for batteries that retain capacity \geq 100% of the manufacturer's rating. Degradation is indicated when the battery capacity drops by more than 10% of rated capacity relative to its capacity on the previous performance test or is below 90% of the manufacturer's rating. These Frequencies are based on the recommendations in IEEE-450 (Ref. 8).

This SR is modified by a Note. The reason for the Note is that performing the Surveillance would remove a required DC electrical power subsystem from service, perturb the electrical distribution system, and challenge safety systems. The Division 3 test may be performed in MODE 1, 2, or 3 in conjunction with HPCS system outages. Credit may be taken for unplanned events that satisfy the Surveillance.

REFERENCES

1. 10 CFR 50, Appendix A, GDC 17.
 2. Regulatory Guide 1.6, March 10, 1971.
 3. IEEE Standard 308, 1978.
 4. UFSAR, Section 8.3.2.
 5. UFSAR, Chapter 6.
 6. UFSAR, Chapter 15.
 7. Regulatory Guide 1.93, December 1974.
 8. IEEE Standard 450, 1987.
 9. Regulatory Guide 1.32, February 1977.
 10. Regulatory Guide 1.129, December 1974.
 11. IEEE Standard 485.
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