Entergy Operations, Inc.
P. O. Box 756
Port Gibson, MS 39150

Michael A. Krupa
Director, Extended Power Uprate
Grand Gulf Nuclear Station
Tel. (601) 437-6694

GNRO-2011/00092

October 24, 2011

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

SUBJECT: Supplemental Information Pertaining to Extended Power Uprate

Grand Gulf Nuclear Station, Unit 1
Docket No. 50-416
License No. NPF-29

REFERENCE: Entergy Operations, Inc. letter to the NRC (GNRO-2010/00056), *License Amendment Request – Extended Power Uprate*, September 8, 2010 (ADAMS Accession No. ML102660403)

Dear Sir or Madam:

In the referenced letter, Entergy Operations, Inc. (Entergy) submitted to the NRC a license amendment request (LAR), which proposes to revise the Grand Gulf Nuclear Station (GGNS) Operating License (OL) and Technical Specifications (TS) to increase the maximum reactor core power operating limit from 3898 megawatts thermal (MWt) to 4408 MWt.

Based on a telephone call with the NRC staff on October 18, 2011, Entergy is providing supplemental information to address a staff question pertaining to 10 CFR 50, Appendix J testing and bypass leakage testing. This information is provided in the attachment to this letter.

The No Significance Hazards Determination and the Environmental Consideration provided in Reference 1 are not impacted by this response.

This letter contains no new commitments.

If you have any questions or require additional information, please contact Mr. Guy Davant at (601) 368-5756.

I declare under penalty of perjury that the foregoing is true and correct; executed on October 24, 2011.

Sincerely,

MAK/ghd

Attachment: Supplemental Information Pertaining to Extended Power Uprate

cc: Mr. Elmo E. Collins, Jr.
Regional Administrator, Region IV
U. S. Nuclear Regulatory Commission
612 East Lamar Blvd., Suite 400
Arlington, TX 76011-4005

U. S. Nuclear Regulatory Commission
ATTN: Mr. A. B. Wang, NRR/DORL (w/2)
ATTN: ADDRESSEE ONLY
ATTN: Courier Delivery Only
Mail Stop OWFN/8 B1
11555 Rockville Pike
Rockville, MD 20852-2378

State Health Officer
Mississippi Department of Health
P. O. Box 1700
Jackson, MS 39215-1700

NRC Senior Resident Inspector
Grand Gulf Nuclear Station
Port Gibson, MS 39150

ATTACHMENT

GRAND GULF NUCLEAR STATION

GNRO-2011/00092

SUPPLEMENTAL INFORMATION PERTAINING TO EXTENDED POWER UPRATE

SUPPLEMENTAL INFORMATION PERTAINING TO EXTENDED POWER UPRATE

By application dated September 8, 2010, Entergy Operations, Inc. (Entergy) submitted to the NRC a license amendment request (LAR), which proposes to revise the Grand Gulf Nuclear Station (GGNS) Operating License (OL) and Technical Specifications (TS) to increase the maximum reactor core power operating limit from 3898 megawatts thermal (MWt) to 4408 MWt.

Based on a telephone call with the NRC staff on October 18, 2011, Entergy is providing supplemental information to address a staff question pertaining to 10 CFR 50, Appendix J testing and bypass leakage testing.

Request for Additional Information

Provide: a) justification why it is appropriate to have the five Technical Specification Surveillance Requirements (3.6.1.1.1, 3.6.1.3.5, 3.6.1.3.9, 3.6.5.1.1 and 3.6.5.1.2) in a single license condition rather than separating them out by test purpose; and b) confirmation the new EPU bypass leakage effective area capability A/√K limit of ≤ 0.8 sq. ft. will be met upon implementation.

Response

a) Three of the surveillance requirements (SRs) relate to Appendix J containment leakage testing requirements (3.6.1.1.1, 3.6.1.3.5 and 3.6.1.3.9). Two of the SRs implement drywell bypass leakage testing and examination requirements (3.6.5.1.1 and 3.6.5.1.2). SR 3.6.1.1.1 is for the containment integrated leakage rate test (App J Type A test); this test is typically performed every ten years (120 months) and involves the use of large air compressors to support the pressurization of the building. Similarly, the drywell bypass leakage test of SR 3.6.5.1.1 is typically performed every 120 months and also involves the use of large compressors. The frequency of the visual examination requirement of SR 3.6.5.1.2 is clearly tied to the performance of the Appendix J Type A test of SR 3.6.1.1.1.

   Entergy believes this scheduling relationship among the SRs justifies maintaining a single license condition rather than splitting it into forming two conditions. Therefore, Entergy requests the proposed license condition be retained as written.

b) As stated above, the drywell bypass leakage test specified in SR 3.6.5.1.1 is performed once every 120 months. The Technical Specification imposes an acceptance criterion of 10% of the bypass leakage limit. The most recent test was completed on October 20, 2008. The result from that test indicated an actual A/√K value of 0.019 sq. ft. This result meets the new A/√K criterion of 0.8 sq. ft. with ample margin. Therefore, Entergy confirms the EPU bypass leakage effective area capability A/√K limit is met at implementation of the EPU and can be next performed at its established frequency.