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GNRO-2003/00019

March 19, 2003

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

Subject: Grand Gulf Nuclear Station Unit 1  
Docket No. 50-416  
Application for Technical Specification Improvement to Eliminate  
Requirements for Post Accident Sampling Stations for Boiling  
Water Reactors Using the Consolidated Line Item Improvement  
Process (CLIIP) (LDC-2002/066)

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Entergy Operations Inc., (Entergy) hereby requests amendment of Facility Operating License for Grand Gulf Nuclear Station, Unit 1 (GGNS).

The proposed amendment would delete Technical Specification (TS) 5.5.3, "Post Accident Sampling" (PASS), Section 2.C (33) (c) of the Operating License (OL) and add the following phrase to the reference to PASS in TS 5.5.2: "(until such time as a modification eliminates the PASS penetration as a potential leakage path)." This change will eliminate the TS requirement to have and maintain the Post Accident Sampling Station at GGNS. The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-413, "Elimination of Requirements for a Post Accident Sampling System." The availability of this TS improvement was announced in the Federal Register on March 20, 2002 as part of the Consolidated Line Item Improvement Process (CLIIP). In accordance with 10 CFR 50.91 a copy of this application, with attachments, is being provided to the State of Mississippi.

Essential details and information to support this request are provided in the Attachments to this letter. Attachment 1 provides a description of the proposed change, the requested confirmation of applicability, and plant-specific verifications. The OL and TS pages annotating the proposed changes are provided in Attachment 2 and a list of regulatory commitments is provided in Attachment 3. Entergy is respectfully requesting review and approval of this request by September 01, 2003. Once approved, the amendment will be implemented within 120 days.

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If you have any questions or require additional information, please contact Bill Brice at 601-368-5076.

I declare under penalty of perjury that the forgoing is true and correct. Executed on March 19, 2003

Yours truly,



WAE/WBB/amt  
attachments:

1. Analysis of Proposed Operating License and Technical Specification Changes
2. Proposed Operating License and Technical Specification Changes (mark-up)
3. List of Regulatory Commitments

cc: U. S. Nuclear Regulatory Commission  
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Regional Administrator, Region IV  
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U. S. Nuclear Regulatory Commission  
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Mr. T. L. Hoeg (GGNS Senior Resident Inspector)  
Mr. D. E. Levanway (Wise Carter)  
Mr. L. J. Smith (Wise Carter)  
Mr. N. S. Reynolds  
Mr. H. L. Thomas

**ATTACHMENT 1 TO GNRO-2003/00019**  
**ANALYSIS OF PROPOSED OPERATING LICENSE AND TECHNICAL**  
**SPECIFICATION CHANGES**

## 1.0 DESCRIPTION

This letter is a request to amend Operating License (OL) NPF-29 for Grand Gulf Nuclear Station, Unit 1 (GGNS). The proposed amendment deletes the program requirements of Technical Specification (TS) 5.5.3, "Post Accident Sampling."; Section 2C (33) (c), "Post Accident Sampling", of the OL; and incorporates a caveat into TS 5.5.2, "Primary Coolant Sources Outside Containment", that would permit the elimination of the PASS as a potential leakage path if a system modification is pursued.

The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-413. The availability of this technical specification improvement was announced in the Federal Register on March 20, 2002 as part of the Consolidated Line Item Improvement Process (CLIIP).

## 2.0 ASSESSMENT

### 2.1 Applicability of Published Safety Evaluation

Entergy Operations Inc, (Entergy) has reviewed the safety evaluation published on December 27, 2001 (66 FR 66949) as part of the CLIIP. This verification included a review of the NRC staff's evaluation (as modified slightly by the notice of availability) as well as the supporting information provided to support TSTF-413 (i.e., NEDO-32991, "Regulatory Relaxation for BWR Post Accident Sampling Stations (PASS)," submitted November 30, 2000, and the associated NRC safety evaluation dated June 12, 2001). Entergy has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to GGNS and justify this amendment for the incorporation of the changes to the GGNS OL and TS.

### 2.2 Optional Changes and Variations

The GGNS TS include an administrative requirement for a program to minimize the leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident. PASS is specifically listed in TS 5.5.2 as falling under the scope of this requirement. As described in the Staff's model safety evaluation published on December 27, 2001, Entergy may implement a modification that would eliminate PASS as a potential leakage path. Entergy proposes to add the following phrase to the reference to PASS in TS 5.5.2: "(until such time as a modification eliminates the PASS penetration as a potential leakage path)."

Also as described in the model safety evaluation, the elimination of the TS and other regulatory requirements for PASS results in a change to the OL. The change would eliminate Section 2.C (33) (c) of the OL. The change is necessary due to the removal of the TS section on PASS. The above changes do not revise technical requirements beyond that addressed by the NRC staff in the model safety evaluation published on December 27, 2001.

### **3.0 REGULATORY ANALYSIS**

#### **3.1 No Significant Hazards Consideration Determination**

Entergy has reviewed the proposed no significant hazards consideration determination published on December 27, 2001 (66 FR 66949) as part of the CLIP. Entergy has concluded that the proposed determination presented in the notice is applicable to GGNS and the determination is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

#### **3.2 Verification and Commitments**

Entergy verified it has contingency plans for obtaining and analyzing highly radioactive samples from the Reactor Coolant System (RCS), suppression pool, and containment atmosphere. The contingency plans are in plant procedures and implementation is complete. Establishment and maintenance of these plans is considered a regulatory commitment.

The capability for classifying fuel damage events at the Alert level threshold will be established for Grand Gulf Nuclear Station, Unit 1 at the 300  $\mu\text{Ci/cc}$  dose equivalent iodine level. This capability will be described in plant procedures and implementation will be complete within 120 days of amendment issuance. The capability for classifying fuel damage events is considered a regulatory commitment.

Entergy verified that it has an I-131 site survey detection capability, including an ability to assess radioactive iodines released to offsite environs, by using effluent monitoring systems or portable sampling equipment. The capability for monitoring iodines will be maintained within the plant's procedures, therefore, implementation is complete. The capability to monitor radioactive iodines is considered a regulatory commitment.

### **4.0 ENVIRONMENTAL EVALUATION**

Entergy has reviewed the environmental evaluation included in the model safety evaluation published on December 27, 2001 (66 FR 66949) as part of the CLIP. Entergy has concluded that the staff's findings presented in that evaluation are applicable to GGNS and the evaluation is hereby incorporated by reference for this application.

**ATTACHMENT 2 TO GNRO-2003/00019**  
**PROPOSED OPERATING LICENSE AND TECHNICAL SPECIFICATION**  
**CHANGES (MARK-UP)**

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(32) Partial Feedwater Heating (Section 15.1, SER, SSER #2)

Operation of the plant in the partial feedwater heating mode for the purpose of extending the normal fuel cycle shall be prohibited until analyses which justify that operation are provided to and approved by the NRC staff.

(33) NUREG-0737 Conditions (Section 22.2)

The following conditions shall be completed to the satisfaction of the NRC. These conditions reference the appropriate items in Section 22.2, "TMI Action Plan Requirements for Applicants for Operating Licenses," in the Safety Evaluation Report and Supplements 1, 2, 3, 4, and 5 to NUREG-0831.

(a) Control Room Design Review (I.D.1, SER; Appendix E, SSER #2, SSER #4, SSER #5)

Prior to startup following the first refueling outage, SERI shall demonstrate the ability to maintain an "effective temperature" condition of 85°F or less in the remote shutdown panel (RSP) room for at least 8 hours with an ambient outdoor temperature of at least 95°F.

(b) Training During Low-Power Testing (I.G.1, SER)

Prior to restart following the first refueling outage, MP&L shall complete the additional training and testing related to TMI Action Plan I.G.1 as described in Section 2.3 of the MP&L submittal dated April 3, 1986.

Deleted

~~(c) Post Accident Sampling (II.B.3, SER, SSER #1, SSER #4, SSER #5)~~

~~Prior to startup following the first refueling outage, MP&L shall incorporate the additional requirements into the procedure for relating radionuclide gaseous and ionic species to estimate core damage as discussed in Section II.B.3.1 of SSER #4.~~

(d) Hydrogen Control (Section II.B.7, SER, SSER #2, SSER #3, SSER #4, SSER #5)

(1) During the first cycle of operation, MP&L shall maintain a suitable program of analysis and testing of the installed hydrogen ignition system. EOI shall submit to the NRC quarterly reports on the status of their research programs.



5.5 Programs and Manuals

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5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the:

- a. LPCS System;
- b. HPCS System;
- c. RHR System outside containment containing steam or water, except the line to the liquid radwaste system and headers that are isolated by manual valves;
- d. RCIC System outside containment containing steam or water, except the drain line to the main condenser;
- e. Hydrogen analyzers of the Combustible Gas Control System;
- f. Post Accident Sampling System Insert A
- g. Feedwater Leakage Control System; and
- h. Suppression pool level detection portion of the Suppression Pool Makeup System.

The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

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(continued)

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### **Insert A**

(until such time as a modification eliminates the PASS penetration as a potential leakage path);

5.5 Programs and Manual (continued)

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5.5.3

Post Accident Sampling

*Deleted*

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive gases, and particulates in plant gaseous effluents and containment atmosphere samples under accident conditions. The program shall include the following:

- a. Training of personnel;
- b. Procedures for sampling and analysis; and
- c. Provisions for maintenance of sampling and analysis equipment.

5.5.4

Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;
- b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to ten times the concentration values in 10 CFR 20, Appendix B, Table 2, Column 2;
- c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM;
- d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from the unit to unrestricted areas, conforming to 10 CFR 50, Appendix I;

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**ATTACHMENT 3 TO GNRO-2003/00019**  
**LIST OF REGULATORY COMMITMENTS**

### List of Regulatory Commitments

The following table identifies those actions committed to by Entergy in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

COMMITMENT	TYPE (Check one)		SCHEDULED COMPLETION DATE (If Required)
	ONE- TIME ACTION	CONTINUING COMPLIANCE	
Contingency plans for obtaining and analyzing highly radioactive samples from the Reactor Coolant System (RCS), suppression pool, and containment atmosphere are in plant procedures and implementation is complete.		Yes	Verify item complete and enter into commitment tracking system within 120 days of issuance
The capability for classifying fuel damage events at the Alert level threshold will be established at the 300 µCi/cc dose equivalent iodine level. This capability will be described in plant procedures and implementation will be complete within 120 days of amendment issuance.		Yes	Within 120 days of amendment issuance
I-131 site survey detection capability, including an ability to assess radioactive iodines released to offsite environs, by using effluent monitoring systems or portable sampling equipment has been verified and will be maintained within the plant's procedures, therefore, implementation is complete.		Yes	Verify item complete and enter into commitment tracking system within 120 days of issuance