



Entergy

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November 18, 1999

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Director
Nuclear Safety Assurance

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

**Subject: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-29
Revision 40 to the Grand Gulf Nuclear Station Emergency Plan**

GNRO-99/00088

Gentlemen:

In accordance with the requirements of 10CFR50 Appendix E, Section V, Entergy Operations, Inc., hereby submits Revision 40 of the GGNS Emergency Plan. These changes do not decrease the effectiveness of the plan and the plan, as changed, continues to meet the standards of Section 50.47(b) and the requirements of Appendix E.

If you have any questions concerning this matter, please contact Mr. W. B. Abraham at (601) 437-2319.

Yours truly,

WBA/be
attachment:
cc:

**GGNS Emergency Plan Revision 40
(See Next Page)**

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Revision No. 40

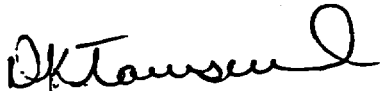
Date 10-23-99


GRAND GULF NUCLEAR STATION


EMERGENCY PLAN


NON-SAFETY RELATED

Implementation of this revision will not decrease the effectiveness of the Emergency Plan, and the Plan will continue to meet the standards of 10 CFR 50.47(B) and the requirements of 10 CFR 50, Appendix E.

Prepared: 

Reviewed/Approved: 
Manager, Emergency Preparedness

Reviewed/Approved:  acting for / 9-8-99
Manager, Nuclear Training / Date

Reviewed/Approved:  10/19/99
Chairman, Plant Safety Review Committee / Date

Reviewed/Approved:  10/22/99
General Manager, GGNS / Date

Reviewed/Approved:  10/23/99
Vice President, Operations GGNS / Date

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GRAND GULF NUCLEAR STATION
EMERGENCY PLAN
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TABLE 4-1

EMERGENCY ACTION LEVELS

SITE AREA EMERGENCY	
NUREG-0654 INITIATING CONDITIONS	EMERGENCY ACTION LEVEL
<p>10. a. Effluent monitors detect levels corresponding to greater than 50 mr/hr for 1/2 hour or greater than 500 mr/hr W.B. for 2 minutes (or five times these levels to the thyroid) at the site boundary for <u>adverse meteorology</u></p> <p>b. These dose rates are projected based on other plant parameters (e.g., radiation level in containment with leak rate appropriate for existing containment pressure) or are measured in the environs</p> <p>c. EPA Protective Action Guidelines are projected to be exceeded outside the site boundary</p>	<p>1. Any post accident effluent radiation monitor confirm release rates corresponding to:</p> <p style="margin-left: 40px;">a. 0.5 Ci/sec Noble Gas for 30 minutes <u>or</u></p> <p style="margin-left: 40px;">b. 6.0 E-4 Ci/sec Iodine for 30 minutes <u>or</u></p> <p style="margin-left: 40px;">c. 5.0 Ci/sec Noble Gas for 2 minutes <u>or</u></p> <p style="margin-left: 40px;">d. 6.0 E-3 Ci/sec Iodine for 2 minutes <u>or</u></p> <p>2. Radiation monitoring teams report radiation and/or Iodine concentration readings at the site boundary corresponding to:</p> <p style="margin-left: 40px;">a. 50 mR/Hr for 30 minutes <u>or</u></p> <p style="margin-left: 40px;">b. 500 mR/Hr for 2 minutes <u>or</u></p> <p style="margin-left: 40px;">c. 6.0 E-6 µCi/cc Iodine <u>or</u></p> <p>3. Containment post accident radiation monitor:</p> <p style="margin-left: 40px;">a. >330 R/hr for 30 minutes <u>or</u></p> <p style="margin-left: 40px;">b. >3,300 R/hr for 2 minutes</p>
<p>11. Imminent loss of physical control of the plant</p>	<p>1. Physical attack on the plant involving imminent occupancy of the Control Room or Remote Shutdown Panel or vital areas.</p>
<p>12. Severe natural phenomena being experienced or projected with plant not in cold shutdown</p>	<p>1. A verified earthquake detected by in-plant seismic instrumentation \geq SSE levels <u>or</u></p> <p>2. Sustained winds \geq 90 mph onsite</p>

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TABLE 4-1

EMERGENCY ACTION LEVELS

GENERAL EMERGENCY	
NUREG-0654 INITIATING CONDITIONS	EMERGENCY ACTION LEVEL
<p>2. (Continued)</p> <p>Loss of 2 of 3 fission product barriers with a potential loss of 3rd barrier, (e.g., loss of primary coolant boundary, clad failure, and high potential for loss of containment)</p>	<p>1. (Continued)</p> <p>Loss of any two of the following fission product boundaries with a potential for loss of the third:</p> <p style="text-align: center;"><u>Reactor Pressure Boundary</u></p> <p style="text-align: center;"><u>Loss</u></p> <p>a. Drywell pressure >1.23 psig <u>and</u> indication of a steam leak in the drywell</p> <p style="text-align: center;"><u>or</u></p> <p>b. Main steam line not isolated</p> <p style="text-align: center;"><u>or</u></p> <p>c. RCIC steam line break outside containment with inability to isolate</p> <p style="text-align: center;"><u>Potential loss</u></p> <p>a. Total reactor coolant leakage calculated to be >50 gpm</p> <p style="text-align: center;"><u>or</u></p> <p>b. >10 R/hr in Containment</p> <p style="text-align: center;"><u>Primary Containment</u></p> <p style="text-align: center;"><u>Loss</u></p> <p>a. Primary containment pressure >56 psig</p> <p style="text-align: center;"><u>or</u></p> <p>b. Loss of ability to isolate drywell or primary containment leakage into areas outside the primary containment</p> <p style="text-align: center;"><u>Potential Loss</u></p> <p>a. Primary containment pressure >22 psig</p> <p style="text-align: center;"><u>or</u></p> <p>b. Operation in the unsafe region of HCTL <u>or</u> PSP curve</p> <p style="text-align: center;"><u>or</u></p> <p>c. Operation in the unsafe region of HDOL curve with the Hydrogen Igniters De-Energized</p>
<p>3. Loss of physical control of the facility</p> <p>Note: Consider 2 mile precautionary evacuation</p>	<p>1. Physical attack on the plant has resulted in unauthorized personnel controlling Decay Heat Removal, Reactor Water Level or Reactivity Control capabilities.</p>