

Entergy Operations, Inc. Waterloo Road P.O. Box 756 Port Gibson, MS 39150 Tel 601 437 6470

Jerry C. Roberts Director Nuclear Safety Assurance

June 15, 2000

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 Generic Letter 94-02 and License Amendment 141, Confirmation of Completed Actions
- Reference: NRC Generic Letter 94-02, "Long-Term Solutions and Upgrade of Interim Operating Recommendations for Thermal Hydraulic Instabilities in Boiling Water Reactors"

GNRO-2000/00050

Ladies & Gentlemen:

Generic Letter (GL) 94-02 was issued by the NRC on July 11, 1994 to collect information from affected licensees to assure compliance with General Design Criteria (GDC) 10 and 12 in Appendix A to Part 50 of the Code of Federal Regulations (10 CFR 50). GL 94-02 contained two requested actions and two reporting requirements. The requested actions prompted affected licensees to; 1) take the appropriate actions to augment its respective procedures and training for preventing or responding to thermal-hydraulic instabilities in its reactors, and 2) develop and submit to the NRC a plan for long-term stability corrective actions needed to ensure that the plant is in compliance with GDC 10 and 12.

The corresponding reporting requirement Item 1 for the above requested actions required a response providing affected licensee's plans and status for implementing the requested actions presented in the generic letter. Alternatively, licensees who elected not to implement the requested actions were required to submit the rationale for not taking the requested actions, a description of any substitute actions, and the schedule for implementing the substitute actions.

In response to NRC concerns, the Boiling Water Reactor Owners' Group (BWROG) initiated a project to investigate actions that should be taken to resolve the BWR stability issue. GGNS was a participant in the BWROG initiative to develop a core stability long-term solution.

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Attachment 1 provides a list of docketed correspondence relevant to GGNS' responses to satisfy the requested actions of GL 94-02. Our initial response to GL 94-02 (Reference 1) affirmed that GGNS would take the actions requested by GL 94-02. In this submittal, we committed to implement Enhanced Option I-A as the long-term stability option at GGNS and provided a projected implementation schedule, as subsequently supplemented by Reference 2. Enhanced Option I-A was developed by the BWROG as a feasible long-term stability methodology and is fully described in NEDO-32339-A, Revision 1 (Reference 3). The corresponding NRC acceptance of Enhanced Option I-A as a long-term stability solution to satisfy the Staff's concerns delineated in GL 94-02 is documented in the NRC's letter dated February 25, 1998 (Reference 4).

Reference 5, as supplemented by Reference 6 proposed changes to the GGNS Technical Specifications that were needed in order to implement Enhanced Option I-A and proposed an additional revision to our implementation date to be consistent with approval of the requested Technical Specification changes.

NRC approval of the proposed changes to the GGNS Technical Specifications was delineated in the NRC's safety evaluation report as Amendment 141 to the GGNS Facility Operating License, dated January 19, 2000 (Reference 7). Amendment 141 requested that Enhanced Option I-A be implemented within 120 days of the license amendment date, which equates to an implementation date of May 18, 2000.

Reporting Requirement Item 2 of GL 94-02 and the Amendment 141 SER requested licensees to provide written confirmation to the Staff within 30 days of completing the requested actions. The stability long-term solution, Enhanced Option I-A, was implemented at GGNS on May 17, 2000. This submittal satisfies reporting requirement Item 2 and the Amendment 141 request, thus effectively closes all actions relative to complying with the requested actions of GL 94-02 for GGNS.

With implementation of the Enhanced Option I-A long-term thermal-hydraulic stability solution, we are confident that uncontrolled power oscillations can either be prevented from occurring, or be readily detected and suppressed should they occur, thus ensuring that the plant is in full compliance with GDC 10 and GDC 12.

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Documentation supporting approval and implementation of the requested actions of GL 94-02 at GGNS is available for NRC review and audit. This information is being submitted under affirmation in accordance with 10 CFR 50.54(f)(Attachment 2). Please contact Charles E. Brooks at (601) 437-6555 should you have any questions, or require additional information pertaining to this issue.

Yours truly,

JCR/CEB:ceb attachments:

- 1) Relavent Supporting References for GGNS' Responses to GL 94-02
- 2) Affirmation Pursuant to 10 CFR 50.54(f)

CC:

<b>Dixon-Herrity</b>	J. L.	GGNS Senior Resident)	(w/a)
Levanway	D. E.	(Wise Carter)	(w/a)
Reynolds	N. S.		(w/a)
Smith	L. J.	(Wise Carter)	(w/a)
Thomas	H. L.		(w/o)

Mr. E. W. Merschoff (w/2) Regional Administrator U.S. Nuclear Regulatory Commission Region IV 611 Ryan Plaza Drive, Suite 400 Arlington, TX 76011

### ATTN: ADDRESSEE ONLY

Mr. S. P. Sekerak, NRR/DLPM/PD IV-1 (w/2) U.S. Nuclear Regulatory Commission One White Flint North, Mail Stop O7-D1 11555 Rockville Pike Rockville, MD 20852-2378 June 15, 2000 GNRO-2000/00050

bcc:

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	GGN CENTRAL FILE (9)			
	GGN PLANT LICENSING			
	James	D. E.	(ANO-NSAPL)	
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	Krupa	M. A.	(ECH-NSL)	
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	Perkins	E. P.	(W3-NSA)	
	Roberts	J. C.	(GG-NSA)	
	Shelly	W. M.	(GG-TRNG)	
	Vandergrift	J. D.	(ANO-LIC)	
	Venable	J. E.	(GG-GMPO)	

OTHER: File (LRS\_DOCS Directory - GNRI or GNRO)

Broadbent Bryant Burmeister Cade	G. E. T. M. B. M. W. C <i>.</i>
Campbell	J. A.
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Crowe	R. L.
Czaika	J. P.
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Ellsaesser	C. W.
Feminella	J. A.
Hollis	D. G.
Langley	E. L.
Мау	M. R.
McDirmid	D. P.
Rider	R. W.
Roberts	J. C.
Robertson	J. L.
Thompson	R. A.
Walker	Κ.
Withrow	M. D.

# Generic Letter 94-02, Confirmation of Completed Actions

## References:

- 1. Letter C. R. Hutchinson (Entergy Operations, Inc. GGNS) to the U. S. Nuclear Regulatory Commission, dated September 7, 1994 "Response to Generic Letter 94-02"
- 2. Letter Joseph J. Hagan (Entergy Operations, Inc. GGNS) to the U. S. Nuclear Regulatory Commission, dated October 18, 1996 "Follow-Up Response to Generic Letter 94-02, Long-Term Solutions and Upgrade of Interim Operating Recommendations for Thermal Hydraulic Instabilities in Boiling Water Reactors Commitment Revision"
- 3. NEDO-32339-A, Revision 1, "Reactor Stability Long-Term Solution: Enhanced Option I-A", April 1998.
- 4. Letter U. S. Nuclear Regulatory Commission to BWROG dated February 25, 1998
- Letter Joseph J. Hagan (Entergy Operations, Inc. GGNS) to the U. S. Nuclear Regulatory Commission, dated July 20, 1998 "Enhanced Option I-A Core Stability, Proposed Amendment to the Operating License (LDC 1997-02)"
- 6. Letter William A. Eaton (Entergy Operations, Inc. GGNS) to the U. S. Nuclear Regulatory Commission, dated June 29, 1999 "Enhanced Option I-A Core Stability, Supplement to Proposed Amendment to the Operating License (LDC 1997-02)"
- Letter U. S. Nuclear Regulatory Commission to William A. Eaton (Entergy Operations, Inc. -GGNS), dated Januaary 19, 2000 "Grand Gulf Nuclear Station Unit 1 – Issuance of Amendment Re: Reactor Core Stability Enhanced Option I-A"

### **BEFORE THE**

### UNITED STATES NUCLEAR REGULATORY COMMISSION

#### LICENSE NO. NPF-29

#### DOCKET NO. 50-416

#### IN THE MATTER OF

#### ENTERGY MISSISSIPPI, INC.

and

#### SYSTEM ENERGY RESOURCES, INC.

and

## SOUTH MISSISSIPPI ELECTRIC POWER ASSOCIATION

and

#### ENTERGY OPERATIONS, INC.

#### **AFFIRMATION**

I, J. C. Roberts, state that I am Director, Nuclear Safety Assurance, GGNS of Entergy Operations, Inc.; that on behalf of Entergy Operations, Inc., System Energy Resources, Inc., and South Mississippi Electric Power Association I am authorized by Entergy Operations, Inc. to sign and file with the Nuclear Regulatory Commission, this response to Generic Letter 94-02; that I signed this response as Director, Nuclear Safety Assurance, GGNS of Entergy Operations, Inc.; and that the statements made and the matters set forth therein are true and correct to the best of my knowledge, information and belief.

J. C. Roberts

STATE OF MISSISSIPPI COUNTY OF CLAIBORNE SUBSCRIBED AND SWORN TO before me, a Notary Public, in and for the County and State above named, this day of, 2000.

(SEAL)

wach A. Daken

My commission expires:

Notary Public

MISSISSIPPI STATEWIDE NOTARY PUBLIC MY COMMISSION EXPIRES OCT. 27, 2000 BONDED THRU STEGALL NOTARY SERVICE