



**ENTERGY**

**Entergy Operations, Inc.**

P.O. Box 756  
Port Gibson, MS 39150  
Tel 801 437 6406

**W. T. Cottle**

Vice President  
Operations  
Grand Gulf Nuclear Station

July 7, 1992

U.S. Nuclear Regulatory Commission  
Mail Station Pi-137  
Washington, D.C. 20555

Attention: Document Control Desk

Subject: Grand Gulf Nuclear Station  
Unit 1  
Docket No. 50-416  
License No. NPF-29  
Generic Issue No. 143, "Availability of Chilled Water Systems  
and Room Cooling"

ENRO-92/00082

Gentlemen:

On June 30, 1991, a revision to NUREG 0933 was issued containing Generic Issue (GI) No. 143, "Availability of Chilled Water Systems and Room Cooling". The issue was promulgated on the belief that failure of air cooling systems for areas housing key components, e.g., RHR pumps, switchgear, and diesel generators, could significantly contribute to core-melt probability in some plants. Apparently, the Grand Gulf Nuclear Station's probabilistic risk assessment (PRA) was one of two plant PRAs used to develop Generic Issue #143. The Advisory Committee on Reactor Safeguards (ACRS) is concerned that the impact of these failures on the proper functioning of air cooling systems have not been generically reflected in final PRAs.

Generic Issue #143, as proposed, estimates a reduction in the core damage frequency at the Grand Gulf Nuclear Station (GGNS) of  $8 \times 10^{-6}$  events/KY, should the complete dependency on certain air cooling systems be eliminated. It further assumes some reduction in risk of core damage for every nuclear plant cognizant of these dependencies. As discussed during our June 4, 1992 telephone conversation with members of the Research/Reactor & Plant Safety Issues Branch, it appears that the projected reduction in core damage frequency at the Grand Gulf Nuclear Station, as a result of elimination of all dependence on air cooling systems, alone is greater than the total core damage frequency calculated in the final version of NUREG/CR 4550.

We realize that the information contained in GI #143 is preliminary in nature, and does not form the technical basis to resolve this issue. However, the risk reduction conclusions are used as key inputs to the value/impact evaluation.

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This Generic Issue reinforces the need to review the effects of support systems on core damage frequency. It does not, however, consider plants that may have more current PRA data available as a result of implementation of Generic Letter 88-20. We would like to offer, for information purposes, that GCNS has included as part of its plant-specific Individual Plant Examination (IPE) for severe accident vulnerabilities (Generic Letter No. 88-20), dependency on air cooling systems.

Entergy Operations, Inc. appreciates this opportunity to convey a current perspective on PRAs and efforts currently being made to identify areas in which reductions in the core damage frequency are being pursued. We look forward to your July site visit concerning this issue. If you require any information prior to your visit, please contact this office.

Yours truly,

*WTC/JS/ams*

WTC/JS/ams

cc:

Mr. D. C. Hintz  
Mr. J. L. Mathis  
Mr. R. B. McGehee  
Mr. N. S. Reynolds  
Mr. H. L. Thomas

Mr. Stewart D. Ebnetter  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta St., N.W., Suite 2900  
Atlanta, Georgia 30323

Mr. P. W. O'Connor, Project Manager  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Mail Stop 13H3  
Washington, D.C. 20555