



**System  
Energy**

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February 23, 1990

U.S. Nuclear Regulatory Commission  
Mail Station P1-137  
Washington, D.C. 20555

Attention: Document Control Desk

Gentlemen:

SUBJECT: Grand Gulf Nuclear Station  
Unit 1  
Docket No. 50-416  
License No. NPF-29  
Report No. 50-416/89-30  
Dated 1/31/90 (MAEC-90/0017)  
AECM-90/0034

System Energy Resources, Inc. hereby submits response to violation  
50-416/89-30-01.

Yours truly,

WTC:cg  
Attachment

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Notice of Violation 89-30-01

Technical Specifications 3.4.6.1.b, Pressure/Temperature Limits, requires that the reactor vessel metal temperature shall be limited with a maximum reactor coolant cooldown of 100°F in any one hour period. With any of the above limits exceeded, restore the temperature to within the limits within 30 minutes; perform an engineering evaluation to determine the effects of the out-of-limit conditions on the structural integrity of the reactor coolant system; determine that the reactor coolant system remains acceptable for continued operations or be in at least Hot Shutdown within 12 hours and in Cold Shutdown within the following 24 hours.

Contrary to the above, on December 30, 1989, following a manual reactor scram, the unit exceeded the maximum reactor coolant cooldown rate for the reactor vessel bottom head drain with a 125°F cooldown in a one hour period. The licensee failed to identify the excessive cooldown prior to plant restart on December 31, 1989 and when identified on January 12, 1990, the licensee failed to perform an engineering evaluation to determine that the reactor coolant system structural integrity remained acceptable for continued operations within the 12 hour shutdown requirement. The evaluation was not performed until January 15, 1990.

I. Admission Or Denial Of The Alleged Violation

System Energy Resources, Inc. (SERI) admits to the alleged violation. This violation had no effect on the health and safety of the public.

II. Reason For The Violation If Admitted

This violation occurred due to the following reasons:

- A. The failure to recognize the out-of-limit cooldown rate was primarily due to programmatic deficiencies. The Scram Recovery procedure provided data sheets for logging temperatures for a heatup/cooldown record. The data sheets also required review signatures after completion by the Control Room Operator and the Shift Supervisor. However, the data sheets did not include acceptance criteria and did not clearly assign responsibility for determining if out-of-limit conditions existed. Additionally, the Post Trip Analysis procedure did not require a check of heatup or cooldown rates to ensure acceptability prior to plant restart.
- B. The failure to initiate an engineering evaluation was due to verbal misunderstandings between Operations Staff and the licensed Shift Superintendent located in the Control Room.



The Incident Report was written by Operations Staff in the administrative office and carried to the Shift Superintendent to make required notifications and initiate appropriate Technical Specification actions. Based on the conversation with the Operations Staff, the Shift Superintendent concluded that the required Technical Specification actions had already been accomplished.

Complete details of this event are documented and reported in Licensee Event Report Number 90-001.

### III. Corrective Actions Which Have Been Taken And Results Achieved

A Quality Deficiency Report (QDR #010-90) was initiated to document and resolve this incident. As a result, the following corrective actions have been taken:

1. Integrated Operating Instructions Data Sheets have been changed to require an evaluation of the temperature differential at every 60 minute segment to identify any out-of-limit heatup/cooldown rates. Additionally, completed data sheets require a final documented determination of whether or not the recorded conditions are acceptable when compared to administrative and Technical Specification acceptance criteria.
2. The Post Trip Analysis Procedure (01-S-06-26) has been changed to require a check of the acceptability of the cooldown/heatup rates.
3. A memorandum was issued to the Operations Staff and to the Shift Superintendents informing them of the incident and the expectations of distinct communications and thorough research in the resolution of operational concerns.

### IV. The Corrective Steps Which Will Be Taken To Avoid Further Violations

SERI considers the actions taken in Section III adequate to preclude recurrences of this nature. However, as an additional measure, SERI will enhance the Incident Report and Reportable Events procedure (01-S-06-5) to prompt more complete reviews for Technical Specification compliance.

### V. Date When Full Compliance Will Be Achieved

Full compliance has been achieved except for Section IV. Changes to Procedure 01-S-06-5 will be implemented by April 30, 1990.