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Vice President
Nuclear Operations

November 25, 1987

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Document Control Desk

Gentlemen:

SUBJECT: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-29
Quarterly Status Report
September, 1987, "Degraded Core
Accident Hydrogen Control Program"
AECM-87/0210

The Grand Gulf Nuclear Station (GGNS), Unit 1 Facility Operating License (License No. NPF-29) requires that System Energy Resources, Inc. (SERI) submit to the NRC quarterly reports on the status of the "Degraded Core Accident Hydrogen Control Program." In response to that requirement, SERI is submitting the attached report covering the period from July 1, 1987 through September 30, 1987.

Should you have any questions concerning this report, please contact me.

Yours truly,

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ODK:rg
Attachment

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Quarterly Status Report for
Quarter Ending September 30, 1987

"Degraded Core Accident
Hydrogen Control Program"

Grand Gulf Nuclear Station
Units 1 and 2
Docket Nos. 50-416 and 50-417

System Energy Resources, Inc.

Quarterly Status Report - September 30, 1987

"Degraded Core Accident Hydrogen Control Program"

1.0 Introduction

This quarterly status report is submitted to comply with a requirement in the Grand Gulf Nuclear Station, Unit 1 Facility Operating License (License No. NPF-29). This requirement specifies that System Energy Resources, Inc. (SERI) should provide quarterly reports outlining the status of the on-going research program to address degraded core hydrogen control requirements. This report covers the third calendar quarter of 1987 ending September 30, 1987.

This report includes brief summaries of the submittals made by SERI during this quarter along with summaries of meetings between the NRC staff and SERI. SERI is participating in the Hydrogen Control Owners Group (HCOG) which is conducting generic research and completing generic analyses to resolve the degraded core hydrogen control issue. Since the work completed by HCOG complements SERI's program to resolve this issue, this report also includes summaries of meetings between the HCOG and the NRC. The summaries of these meetings included in this report do not reflect a formal HCOG position with respect to any issue and represent only the SERI interpretation of the meetings.

2.0 Summary of SERI Submittals

AECM-87/0113, July 17, 1987

SERI letter number AECM-87/0113, dated July 17, 1987, provided a revised schedule for submittal of plant specific hydrogen analysis required by 10CFR50.44.

On June 24, 1987, SERI received a letter from the Grand Gulf NRC Project Manager providing guidance on an acceptable scope and schedule for submittal of the Grand Gulf final hydrogen control analysis. Based on this letter, SERI revised the schedule for submittal of plant specific hydrogen analysis required by 10CFR50.44 to six months following issuance of the generic hydrogen control safety evaluation report (SER). SERI also indicated in the referenced letter that the plant specific report for this analysis would take into consideration generic SER recommendations regarding information to be included in the final Grand Gulf specific report.

3.0 Summary of HCOG and NRC Meetings

No formal meetings were held between SERI or HCOG with the NRC this quarter.

4.0 Hydrogen Control Program Status

The summaries and status of the Hydrogen Control Program as stated herein do not reflect the HCOG position with respect to any program and represent only a SERI interpretation of these programs.

4.1 Status of Significant Issues

On June 30, 1987, HCOG met with the NRC to discuss the potential impact of station blackout (SBO) considerations on the HCOG hydrogen control program. HCOG's conclusion following that meeting was that SBO events are not dominant contributors to recoverable degraded core accidents which lead to significant hydrogen generation and, therefore, should not be considered. To support HCOG's conclusion, and as committed to during that meeting, HCOG provided a letter to the NRC documenting the basis for their conclusions as well as providing a written response to address specific NRC concerns. HCOG believes that this submittal will address the NRC concerns related to SBO and ATWS with regards to the HCOG Hydrogen Control Program and provide a basis for dealing with this issue in the generic Hydrogen Control SER.

Critical path for overall resolution of the Grand Gulf hydrogen control issue continues to be the issuance of a generic safety evaluation report.

4.2 Planned Activities for the 4th Quarter of 1987

Complete a detailed outline for the Grand Gulf Final Hydrogen Control Report. Begin work on the sections of the report which have the smallest potential for being affected by the issuance of the generic Hydrogen Control SER.