



MISSISSIPPI POWER & LIGHT COMPANY

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NUCLEAR PRODUCTION DEPARTMENT

January 15, 1982

U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

Attention: Mr. Harold R. Denton, Director

Dear Mr. Denton:

SUBJECT: Hydrogen Control Owners Group
File: 004, 008, 900
Hydrogen Control Program
Document
Corres. No.: HGN-002



The Hydrogen Control Program Document is hereby submitted on behalf of the Hydrogen Control Owners Group (HCOG) consisting of the following domestic BWR-6/Mark III owners:

- Cleveland Electric Illuminating Company (CEI)
- Gulf State Utilities (GSU)
- Illinois Power Company (IPC)
- Mississippi Power & Light Company (MP&L)
- *Puget Sound Power & Light (PSP&L)/Northwest Energy Service Company (NESCO)
- *Public Service of Oklahoma (PSO)
- **Tennessee Valley Authority (TVA)

*These are near term construction permit (NTCP) applicants who will become full members of the HCOG upon receipt of a construction permit.

**TVA is an associate member of the HCOG without any commitment of funds.

The HCOG has selected the Nuclear Safety Analysis Center (NSAC) to serve as program manager.

This report identifies eight tasks that must be completed to satisfactorily resolve issues related to the use of igniter systems for the control of hydrogen in Mark III containments. These tasks are:

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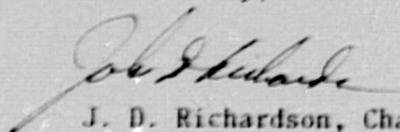
<u>No.</u>	<u>Task</u>
1	Select Scenario
2	Select Mitigation System
3	Design Hydrogen Ignition System
4	Containment Ultimate Capacity Analysis
5	Selection of Containment Response Analysis Code
6	Containment Response Analysis
7	Hydrogen Combustion Testing and Analysis
8	Equipment Survivability Analysis

It is the intent of the HCOG to encompass issues relating to hydrogen control in BWR-6/Mark III containments. Where other industry work or submittals in the public domain adequately address such issues already, or where such work is ongoing, the HCOG intends to incorporate such material by reference so that the allocation of resources of its members is handled efficiently instead of duplicating earlier work.

An example of such an area is the evaluation of alternate methods of hydrogen control. The HCOG is aware of the strong interest of the NRC in the evaluation of alternate hydrogen control methods. The HCOG believes, however, that the adequacy of igniter systems will be demonstrated by the enclosed program and that the HCOG members should not be required to separately allocate resources to the evaluation of alternate hydrogen control technologies when an extensive industry effort in this area is already underway by the AIF/IDCOR program. The IDCOR program will evaluate water fog/sprays, igniters, post-accident inerting, catalytic combustors and recombiners. We believe that additional independent efforts by the HCOG or its members would be superfluous and not in keeping with efforts to allocate resources efficiently.

Any questions on this report should be directed to
Mr. J. D. Richardson (601) 969-2630.

Yours truly,



J. D. Richardson, Chairman
Hydrogen Control Owners Group

SHH/JDR:lm
Attachment

cc: (See Next Page)

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