

OLIVER D. KINGSLEY, JR.
Vice President
Nuclear Operations

October 28, 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
RWCU Isolation Valves
Proposed Amendment to the Operating
License (PCOL-87/12)
AECM-87/0201

System Energy Resources, Inc. (SERI) is submitting by this letter a proposed amendment to the Grand Gulf Operating License. This amendment will support a design change to the divisional power supplies for certain Reactor Water Cleanup System containment and drywell isolation valves.

In accordance with the provisions of 10 CFR 50.4 and 50.30, the signed original of the requested amendment is enclosed and the appropriate copies will be distributed. The attachment provides the technical justification and discussion to support the requested amendment. This amendment has been reviewed and accepted by the Plant Safety Review Committee and the Safety Review Committee.

Based on the guidelines presented in 10 CFR 50.92, SERI has concluded that this proposed amendment involves no significant hazards considerations.

In accordance with the requirements of 10 CFR 170.21, an application fee of \$150 is attached to this letter.

SERI requests a response to this letter by December 31, 1987 to support second refueling outage schedule requirements.

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PDR ADOCK 05000416
P PDR

Yours truly,

ODK:bms

Attachments: 1. Remittance of \$150 Application Fee
2. Affirmation per 10 CFR 50.30
3. GGNS PCOL-87/12

Acc'd w/check \$150 #08-0010

cc: (See Next Page)

P. O. BOX 23070 | JACKSON, MISSISSIPPI 39225-3070 | (601) 960-9600
A Middle South Utilities Company

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cc: Mr. T. H. Cloninger (w/a)
Mr. R. B. McGehee (w/a)
Mr. N. S. Reynolds (w/a)
Mr. H. L. Thomas (w/o)
Mr. R. C. Butcher (w/a)

Dr. J. Nelson Grace, Regional Administrator (w/a)
U. S. Nuclear Regulatory Commission
Region II
101 Marietta St., N. W., Suite 2900
Atlanta, Georgia 30323

Mr. L. L. Kintner, Project Manager (w/a)
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, Maryland 20814

Dr. Alton B. Cobb (w/a)
State Health Officer
State Board of Health
Box 1700
Jackson, Mississippi 39205

BEFORE THE
UNITED STATES NUCLEAR REGULATORY COMMISSION

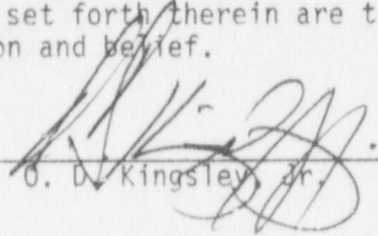
LICENSE NO. NPF-29

DOCKET NO. 50-416

IN THE MATTER OF
MISSISSIPPI POWER & LIGHT COMPANY
and
SYSTEM ENERGY RESOURCES, INC.
and
SOUTH MISSISSIPPI ELECTRIC POWER ASSOCIATION

AFFIRMATION

I, O. D. Kingsley, Jr., being duly sworn, stated that I am Vice President, Nuclear Operations of System Energy Resources, Inc.; that on behalf of System Energy Resources, Inc., and South Mississippi Electric Power Association I am authorized by System Energy Resources, Inc. to sign and file with the Nuclear Regulatory Commission, this application for amendment of the Operating License of the Grand Gulf Nuclear Station; that I signed this application as Vice President, Nuclear Operations of System Energy Resources, 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.

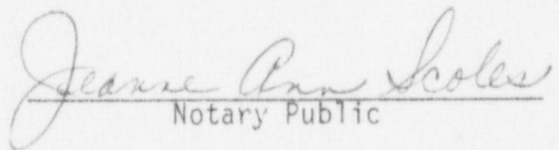


O. D. Kingsley, Jr.

STATE OF MISSISSIPPI
COUNTY OF HINDS

SUBSCRIBED AND SWORN TO before me, a Notary Public, in and for the County and State above named, this 28th day of October, 1987.

(SEAL)



Notary Public

My commission expires:

My Commission Expires Feb. 21, 1991

5. Figure 1 shows a simplified drawing of the RWCU in the post-pump mode of operation and the proposed changes to the divisional motive power for valves G33-F252 and G33-F253.

C. JUSTIFICATION

1. The proposed changes to Tables 3.6.4-1 and 3.8.4.1-1 will reflect a change to the divisional power supply to containment isolation valve G33F252-A and drywell isolation valve G33F253-B in order to correct a design error previously reported in accordance with 10CFR50.73.
2. The proposed design change will provide divisional motive power separation for containment isolation valves F252 and F004 and drywell isolation valves F252 and F253 while the system is operated in the post-pump mode. The proposed change will be consistent with the containment isolation design requirements as described in UFSAR Section 6.2.4.1.

SIGNIFICANT HAZARDS CONSIDERATION

SERI has evaluated the proposed change and determined that the change does not involve a significant hazards consideration for the following reasons:

- 1) The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated because the change will correct a design error previously evaluated and reported to the NRC. The proposed change will bring the subject isolation valves into conformance with the configuration as described in UFSAR Section 6.2.4.1. That configuration had been previously reviewed and approved by the NRC in the GGNS Safety Evaluation Report.
- 2) The proposed change does not create the possibility of a new or different kind of accident previously evaluated because the change conforms to the safety design bases for the containment isolation system as described in the UFSAR and approved by the NRC in the GGNS Safety Evaluation Report. The proposed change will provide containment and drywell isolation such that no single event can interrupt motive power to the respective inboard and outboard isolation valves.
- 3) The proposed change does not involve a reduction in a margin of safety because the proposed isolation valves as modified will continue to: 1) ensure that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of containment and 2) ensure that the drywell atmosphere will be directed to the suppression pool for the full spectrum of line breaks inside the drywell, respectively.

A. SUBJECT

1. NPE-87/06 Design change to the Divisional Power Supply to Reactor Water Cleanup (RWCU) Containment and Drywell Isolation Valves
2. Affected Technical Specification
 - a. Table 3.6.4-1, Containment and Drywell Isolation Valves - page 3/4 6-34.
 - b. Table 3.8.4.1-1, Primary Containment Penetration Conductor Overcurrent Protective Devices - pages 3/4 8-28 and 8-35.

B. DISCUSSION

1. On July 29, 1987, during a review conducted for the annual UFSAR Update, SERI engineers discovered that two motor operated containment isolation valves on the RWCU pump suction line (G33F252-A and G33F004-A for containment penetration Number 87) used in series shared the same divisional power supply. This condition is contrary to UFSAR Section 6.2.4.1.h which states that power operated valves used in series for containment penetration isolation are to be designed such that no single event can interrupt motive power to both closure devices.
2. This event was reported in accordance with 10CFR50.73(a)(2)(ii)(B) and 10CFR50.73(1)(2)(V)(C) via letter from SERI to the NRC dated August 28, 1987 (AECM-87/0168) and designated LER 87-011-00.
3. The RWCU was being operated in the "post-pump" mode of operation at the time of discovery which requires both isolation valves to be open. The post-pump mode is normally used during reactor operation. In this mode reactor water is cooled prior to entering the RWCU pump to extend pump seal life. The RWCU pumps were secured after the discovery and the inboard isolation valve was closed and deactivated in accordance with action statement b of GGNS Technical Specification 3.6.4. The RWCU is currently being operated in the "pre-pump" mode where the reactor water goes directly to the RWCU pumps prior to entering the heat exchangers. This mode of operation conforms to the containment isolation requirements described in UFSAR Section 6.2.4.1.h.
4. As corrective action to the design error, SERI committed to change the divisional power supply for the inboard isolation valve (G33F252-A) from Division I power to Division II power prior to operating the RWCU in the post-pump mode. Also, the divisional power supply for the outboard drywell isolation valve will be changed from Division II to Division I power in order to maintain redundancy for isolation of drywell penetration number 366. These changes will be indicated in Table 3.6.4-1 of the Technical Specifications by changing the valve designator suffix for G33-F252 from "A" to "B" and G33-F253 from "B" to "A". The changes are indicated in Table 3.8.4.1-1 of the Technical Specifications by swapping valve G33-F252 to breaker 52-1641-08 and valve G33-F253 to breaker 52-1511-24. No changes are required for operation of RWCU in the pre-pump mode.