



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION

SUPPORTING AMENDMENTS NOS. 6 TO CPPR-118 AND CPPR-119

DOCKET NOS. 50-416 AND 50-417

A. INTRODUCTION

On September 4, 1974, Construction Permit Nos. CPPR-118 and CPPR-119 were issued to Mississippi Power and Light Company (MP&L) and Middle South Energy, Inc. (MSE) for the Grand Gulf Nuclear Station, Units 1 and 2, two boiling water reactors to be constructed at a common site in Claiborne County, Mississippi.

MP&L currently acts as the agent for MSE in connection with all aspects of NRC licensing and regulation. By letter dated April 3, 1980, MP&L submitted an "Amendment to Application for Licenses and to Construction Permits Nos. CPPR-118 and CPPR-119". The letter requested that Construction Permits Nos. CPPR-118 and CPPR-119 be amended pursuant to 10 CFR Part 50 to include South Mississippi Electric Power Association (SMEPA) as a co-owner of the Grand Gulf facility. The request for amendment noted that SMEPA has entered into agreements with MSE conditional upon NRC approval whereby each would own as tenants in common, the following undivided interests in Grand Gulf Nuclear Station, Units 1 and 2: 90 percent by MSE and 10 percent by SMEPA. The agreement provides for the participants to share the electrical output and to share costs according to these respective percentages. However, under the terms of the agreement, MP&L will continue to act as lead applicant and will retain exclusive responsibility for the licensing, design, procurement, construction, operation, maintenance, and all related functions with respect to Grand Gulf Nuclear Station, Units 1 and 2 and will act as agent for all owners in connection with all aspects of NRC licensing and regulation. MSE will act as the agent for SMEPA.

At this time the NRC staff has completed its review of all safety-significant matters related to the issuance of construction permit amendments relative to SMEPA. This Safety Evaluation is therefore issued in support of Amendment No. 6 to Construction Permit No. CPPR-118 and CPPR-119, admitting SMEPA as co-owner of Grand Gulf Nuclear Station, Units 1 and 2. MP&L has submitted eight copies of the loan commitment guarantee notice indicating favorable action by the Rural Electrification Administration to insure the loan to SMEPA.

The purpose of this Safety Evaluation is to examine the impact of the proposed change in ownership shares as described above on the conclusions presented in the Safety Evaluation of the Grand Gulf Nuclear Station, Units 1 and 2, issued January 1974. Specifically, this evaluation addresses the resultant changes or lack of changes:

1. In the design of the facility or requirements for safety-related information. [Safety Evaluation, Section 21.0, paragraphs (a) through (d)].

2. In the technical qualifications of the transferee to design and construct the proposed facility. [Safety Evaluation, Section 21.0, paragraph (e).]
3. In the financial qualifications of the transferee, i.e., the qualifications of SMEPA to share in the design and construction of Grand Gulf Station, Units 1 and 2. (Safety Evaluation, Section 20.0.)
4. In the conclusions concerning the common defense and security. (Safety Evaluation, Section 21.0, paragraph f.)
5. In the conclusions concerning the health and safety of the public. (Safety Evaluation, Section 21.0, paragraph f.)

In accordance with ALAB-459 (Marble Hill), issued by the Appeal Board on February 16, 1978, which held that co-owners will be deemed to be co-applicants, this application for amendments is construed to include SMEPA as a co-applicant as well as a co-owner with respect to Grand Gulf Nuclear Station, Units 1 and 2.

B. EVALUATION

We have reviewed the application for amendment submitted on April 3, 1980, supplemented by a June 30, 1980 submittal. Our review of safety-related matters and our conclusions concerning each item are described in the following subsections of the evaluation report.

Design of the Facility

We have reviewed the application for amendment submitted by the letter of April 3, 1980, and find no information which leads us to conclude that the requested amendment to the construction permit will result in design changes to the facility. We note the application states "The requested amendment will have no effect on safety related matters heretofore reviewed [by NPC]...". We interpret that quote to be a statement of MP&L's intent regarding the requested action. We have also reviewed the various agreements between MSE and the transferee and find no information which leads us to conclude that the requested amendments to the construction permits will result in design changes to Grand Gulf Nuclear Station, Units 1 and 2.

On the basis of our review of the application for amendment including the above statement of intent by MP&L, we conclude that the participation of SMEPA in the manner described will not result in safety-significant design changes to the facility. We also find that our previous safety conclusions related to the design of the Grand Gulf Station will not be adversely altered by the issuance of the requested amendments to the construction permits to permit participation by SMEPA. These previous safety conclusions are given in paragraphs (a) through (d) of Section 21.0 of the Safety Evaluation of the Grand Gulf Nuclear Station, Units 1 and 2, and throughout Supplements 1-4 thereto.

Technical Qualifications

In paragraph (e) to Section 21.0 of the Safety Evaluation of the Grand Gulf Nuclear Station, Units 1 and 2, we stated our conclusion that MP&L is technically qualified to design and construct the proposed facility. The application for amendment submitted on April 3, 1980 notes agreement among the participants that MP&L will retain exclusive responsibility for the licensing, design, procurement, construction, operation, maintenance and all related functions with respect to Grand Gulf Station, Units 1 and 2 and will act as agent for all owners in connection with all aspects of NRC licensing and regulation. On the basis of this, we conclude that the responsible utility with its organizational structure and staff previously found acceptable remain unchanged upon the addition of SMEPA as a co-owner. We also find that our conclusion of acceptable technical qualifications in paragraph (e) to Section 21.0 of the Safety Evaluation of the Grand Gulf Nuclear Station, Units 1 and 2 will not be altered by the issuance of the amendment to the construction permits to permit participation by SMEPA in Grand Gulf Nuclear Station, Units 1 and 2.

Financial Qualifications of the Transferee, Scope of Review

The NRC regulations relating to the determination of an applicant's financial qualifications appear in Section 50.33(f) and Appendix C to 10 CFR Part 50. These regulations state that there must be reasonable assurance that an applicant can obtain the necessary funds to cover the estimated construction cost of a proposed nuclear power plant and its related fuel cycle costs. This standard of reasonable assurance, however, must be viewed in light of the period of time from the purchase of ownership interest to the date of commercial operation. The latest dates for completion of the proposed Grand Gulf Station, Units 1 and 2 are stated in MP&L's letter of August 8, 1980 to be August 31, 1981 and August 1985, respectively for each of the two units. Consequently, we must make certain basic assumptions in our financial analysis about future conditions. Our analysis of a proposed transferee's financial qualifications requires that we validly assume that there will be rational regulatory policies with respect to the setting of rates and that viable capital markets will exist. The former assumption implies that rates will be set by the appropriate regulatory agencies to at least cover the cost of service, including the cost of capital necessary for purchase of SMEPA's proposed ownership interest in Grand Gulf. The latter assumption implies that capital will be available to SMEPA at some price. Given these fundamental assumptions, our evaluation is then focused on the reasonableness of the proposed transferee's financial plans to participate in its proposed share of the estimated construction costs of the facility.

The following analysis summarizes our review of the information submitted by MP&L and addresses the financial qualifications of SMEPA to finance its share of the cost associated with the design and construction of the Grand Gulf facility.

Construction Cost Estimates

The most recent cost estimates for the Grand Gulf facility are stated in the applicant's financial information submitted under MP&L's letter of application dated April 3, 1980. These estimates are summarized as follows:

Grand Gulf Nuclear Station, Units 1 and 2 - Estimated Construction Costs (thousands of dollars)

Total Generating Plant Cost	\$3,049,000
Nuclear Fuel Inventory Cost for first core	221,556
Total Estimated Cost	<u>\$3,270,556</u>

Amount of Interest in Facility Proposed to Transfer

SMEPA has entered into a conditional agreement with MSE, whereby each would share undivided ownership interests in the Grand Gulf facility as tenants in common. The following is the proposed amount in percentage ownership interests as requested in the application for amendments to the permits.

Grand Gulf Nuclear Station, Units 1 and 2 - Proposed Sharing of Ownership

<u>Name of Owner</u>	<u>Proposed Percentage Interest</u>
MSE	90.0
SMEPA	10.0
TOTAL	<u>100.00</u>

The agreement to transfer ownership interest in the Grand Gulf facility is contingent upon receipt of the necessary approval from NRC. SMEPA will share in the electrical output of the facility when it is completed as it will share in the cost of construction according to its respective percentage share in the facility. MP&L will continue to act as lead applicant and will retain complete responsibility for licensing, design, procurement, construction, operation, maintenance, and all other related functions with respect to the facility. MSE will act as the agent for SMEPA in all matters arising from the facility. The percent allocation is based on the Joint Ownership Participation and Operating Agreements, which will be executed in final at the time the requested amendments to the construction permits are approved by the NRC. Under the terms of the Joint Ownership Agreement, at closing SMEPA will assume responsibility for all costs of construction until such time as the amount of the costs of construction borne by it equals its respective percentage shares of the total costs of construction of the Grand Gulf facility, including its portion of the construction costs incurred during that time. Thereafter,

SMEPA will pay 10 percent of the monthly cost of construction of Grand Gulf until its completion. The Joint Ownership Agreement additionally provides that on the Final Adjustment Date, SMEPA will pay MSE \$1,500,000, which represents all costs incurred, past, present and future, relating to Grand Gulf, which were not capitalized in calculating the cost of construction of Grand Gulf.

Financial Analysis of SMEPA

SMEPA is an operating public utility engaged exclusively in the generation and transmission of electric energy for its seven member Rural Electric Cooperatives in the State of Mississippi. The member cooperatives of SMEPA are as follows:

- Southern Pine Electric Power Association
- Dixie Electric Power Association
- Magnolia Electric Power Association
- Pearl River Valley Electric Power Association
- Singing River Electric Power Association
- Southwest Mississippi Electric Power Association
- Coast Electric Power Association

SMEPA is a corporation duly incorporated under the laws of the State of Mississippi as a non-profit electric power association. It presently serves from its transmission system the total requirements of two of its members and partial requirements for two other members. In addition, two of SMEPA's members purchase their total electric requirements and one of its members purchases its partial electric requirements from Mississippi Power & Light Company. Also, SMEPA purchases from Mississippi Power Company the total requirements of one and the partial requirements of one of its members.

Soon after the closing of SMEPA's purchase of partial ownership interest in Grand Gulf, four additional rural electric distribution cooperatives will join SMEPA as members. The four new member cooperatives will be as follows:

- Coahoma Electric Power Association
- Delta Electric Power Association
- Twin County Electric Power Association
- Yazoo Valley Electric Power Association

These four cooperatives do not have any generating capacity and presently purchase substantially all of their total electrical requirements from MP&L. However, shortly after the cooperatives become members of SMEPA, SMEPA plans to assume generation responsibility for approximately 12 percent of their electrical load, and plans over the next three years to periodically assume additional amounts of their electric load, until such time as all of the new cooperatives' load is supplied by SMEPA.

Furthermore, in addition to assuming generation responsibilities for the four new members, SMEPA also plans, shortly after the closing, to assume the total generation requirements of three of its present members - Magnolia Electric Power Association, Southern Pine Electric Power Association, and Southwest Mississippi Electric Power Association. Magnolia Electric Power Association and Southwest Mississippi Electric Power Association are presently being served their total electrical requirements by MP&L. Southern Pine Electric Power Association is partially served by SMEPA.

SMEPA is a member of the Southeastern Electric Reliability Council (SERC), whose primary purpose is to insure the reliability and adequacy for the electric bulk power supply in the Southeast region of the United States. SERC is a member of the National Electric Reliability Council.

SMEPA and its members are each subject to regulation by the Mississippi Public Service Commission with respect to the location of and the need for new generation and transmission facilities, and its members are subject to regulation with respect to the scope of their service areas. SMEPA's rates, however, are regulated by its directors and are not subject to regulation by the Mississippi Public Service Commission, with the exception of those retail rates which SMEPA's members may charge to consumers inside municipalities which are also served by another electric utility.

All payments made by SMEPA, subsequent to the execution of the Agreements and through completion of the Units, will be made with funds borrowed from the Rural Electrification Administration (REA). Virtually all SMEPA's past capital investments have been financed through loans from the REA, the National Rural Utilities Cooperative Finance Corporation, and REA guaranteed loans from the Federal Financing Bank.

To meet interest costs and make repayment of principal associated with the REA loan required for financing of SMEPA's interest in Grand Gulf, the member cooperatives have entered a long-term contract for the purchase of power from SMEPA. This contract provides that the member cooperatives shall purchase all of their power requirements from SMEPA to the extent that SMEPA has such power and energy facilities available. It further requires that rates be charged by SMEPA for all power purchased by the member cooperatives to produce revenues to meet the cost of operation and maintenance, make payments on amount of principal and interest on all indebtedness of the seller, and among other things, be sufficient to enable SMEPA to comply with all mortgage requirements as they may exist from time to time.

Furthermore, the covenants of SMEPA under its Supplemental Mortgage to REA also require that the cooperative design its rates so as to be able to meet its financial obligations as they become due. Therefore, the Board of Directors of the cooperative is required under both of these provisions to charge rates that will enable SMEPA to meet its financial obligations as they become due.

On September 23, 1980, the REA issued its Notice (45 F.R. 63023) that it had prepared its Finding of No Significant Impact. This concludes that there is no need for the REA to prepare an Environmental Impact Statement in connection with a proposed loan guarantee commitment to SMEPA. The loan guarantee will be used by SMEPA to finance its 10 percent undivided interest in Grand Gulf. On October 2, 1980 the REA issued its loan guarantee commitment notice to SMEPA. This in turn allows SMEPA the ability to use funds guaranteed by the full faith and credit of the United States.

Financial Qualifications Conclusion

Based upon the above analysis, we have concluded that SMEPA has financing plans that provide a reasonable assurance that funds can be obtained to finance its proposed 10 percent undivided ownership interest in Grand Gulf. As a result, we have determined that SMEPA is financially qualified to participate in the design and construction of the Grand Gulf facility to the extent of its percentage interest as set forth above. This conclusion is based on the determination that SMEPA's realized financing plan of obtaining REA guaranteed loans indeed exceeds our requirement that it have a reasonable financing plan in light of relevant circumstances. As a result of REA issuing its loan commitment guarantee notice to SMEPA on October 2, 1980, SMEPA has exceeded the reasonable assurance requirements for obtaining the required capital funding. Furthermore, SMEPA has rate setting authority that permits it to set rates at such levels with its member cooperatives that will enable it to repay its guaranteed obligations.

In summary, our conclusion in Section 20.0 of the Safety Evaluation of the Grand Gulf Nuclear Station, Units 1 and 2, including the same numbered section of Supplement No. 3 thereto, which finds that MP&L and MSE are financially qualified to design and construct the proposed facility, will not be adversely altered by the issuance of the amendments to Construction Permits Nos. CPPR-118 and CPPR-119 as requested with regard to SMEPA.

Common Defense and Security

The application for amendment of Construction Permits Nos. CPPR-118 and CPPR-119 identifies the principal officers and directors of SMEPA, all of whom are citizens of the United States. The application further states that SMEPA is not owned, controlled or dominated by any alien or foreign government. In the application for amendment, SMEPA agrees that it will not permit any individual to have access to Restricted Data until the Office of Personnel Management shall have made an investigation and report to the Nuclear Regulatory Commission on the character, associations and loyalty of such individual, and the Nuclear Regulatory Commission shall have determined that permitting such person to have access to restricted data will not endanger the common defense and security.

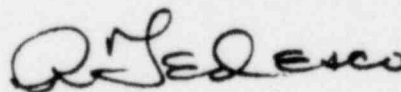
The application also states that MP&L will retain authority and responsibility to procure and manage all nuclear fuel for Grand Gulf Nuclear Station, Units 1 and 2. MP&L will continue to rely upon obtaining fuel as it is needed from sources of supply available for civilian purposes, so that no diversion of special nuclear material for military purposes is involved. On the basis of these statements and agreements, we conclude that the issuance of the requested amendment to the construction permits relative to SMEPA's participation will not be inimical to the common defense and security. We further find that our conclusions in Section 19.0 and 21(f) of the Safety Evaluation of the Grand Gulf Nuclear Station, Units 1 and 2, which finds that the activities to be performed will not be inimical to the common defense and security, will not be adversely altered by this requested amendment to the construction permit relative to SMEPA's participation.

C. SUMMARY OF THE SAFETY EVALUATION

We have examined the impact on safety considerations of amending Construction Permits CPPR-118 and CPPR-119 to add SMEPA as co-applicant and co-owner of a 10 percent undivided share in the Grand Gulf Station, Units 1 and 2. We have concluded that, in accordance with Section 50.35 of 10 CFR Part 50 and Section 2.104 of 10 CFR Part 2:

1. The requested amendments will not result in design changes to the facility,
2. The technical qualifications of the responsible agent, MP&L will not be diminished,
3. SMEPA is financially qualified to participate as described in the design and construction of the facility, and
4. The requested amendments will not endanger the common defense and security.

On the basis of the above conclusions, we find that the issuance of the requested amendment adding SMEPA as co-owner will not be inimical to the health and safety of the public, and that our conclusions in Sections 19.0 and 21(f) of the Safety Evaluation of the Grand Gulf Nuclear Station will remain unaltered. Further, we find that the requested amendment does not involve a significant hazards consideration because this action will not involve a significant increase in the probability or consequences of an accident, and this action will not involve a significant decrease in safety margin.



Robert L. Tedesco, Assistant Director
Division of Licensing

Dated: October 29, 1980