



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

MISSISSIPPI POWER & LIGHT COMPANY

MIDDLE SOUTH ENERGY, INC.

SOUTH MISSISSIPPI ELECTRIC POWER ASSOCIATION

DOCKET NO. 50-416

GRAND GULF NUCLEAR STATION, UNIT 1

FACILITY OPERATING LICENSE

License No. NPF-29

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for license filed by Mississippi Power & Light Company, for itself and Middle South Energy, Inc., and South Mississippi Electric Power Association (hereinafter referred to as the licensees) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Grand Gulf Nuclear Station, Unit 1 (the facility), has been substantially completed in conformity with Construction Permit No. CPPR-118 and the application, as amended, the provisions of the Act, and the regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D. below);
 - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D. below);
 - E. The Mississippi Power & Light Company (MP&L)* is technically qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;

*The MP&L is authorized to act as agent for the co-owners and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

- F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. NPF-29, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, by-product and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70.
2. Based on the foregoing findings regarding this facility and pursuant to Commission Order CLI-84-19, dated October 25, 1984, License NPF-13, as amended, is superseded by this Facility Operating License NPF-29 which is hereby issued to the Mississippi Power & Light Company, Middle South Energy, Inc., and South Mississippi Electric Power Association to read as follows:
- A. This license applies to the Grand Gulf Nuclear Station (GGNS), Unit 1, a boiling water nuclear reactor and associated equipment (the facility), owned by Middle South Energy, Inc., and South Mississippi Electric Power Association and operated by Mississippi Power and Light Company. The facility is located in Claiborne County, Mississippi, and is described in the licensees' "Final Safety Analysis Report," as supplemented and amended, and in the licensees' Environmental Report, as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) Mississippi Power & Light Company (MP&L), pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location in Claiborne County, Mississippi, in accordance with the procedures and limitations set forth in this license;
 - (2) Middle South Energy, Inc., and South Mississippi Electric Power Association to possess the facility at the designated location in Claiborne County, Mississippi, in accordance with the procedures and limitations set forth in this license;

- (3) MP&L, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
 - (4) MP&L, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (5) MP&L, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (6) MP&L, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. The license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level
MP&L is authorized to operate the facility at reactor core power levels not in excess of 3833 megawatts thermal (100% power) in accordance with the conditions specified herein.
 - (2) Technical Specifications
The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B are hereby incorporated into this license. MP&L shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
 - (3) Antitrust Conditions
MP&L shall comply with the antitrust conditions delineated in Appendix C.

(4) Independent Verification of Staff Performance and Other Plant Activities (Section 13.4, SER, SSER #2)

- (a) MP&L shall establish a subcommittee of the Corporate Safety Review Committee to review and evaluate the:
- (i) Status and readiness of the plant and systems needed to support intended modes of operation and/or testing;
 - (ii) Readiness of personnel to conduct intended operation and testing;
 - (iii) Morale and attitudes of plant personnel that have a bearing on safe plant operation;
 - (iv) Past performance in plant operations and adherence to procedures and administrative controls;
 - (v) Changes in current organization with regard to experience and qualifications of plant management and supervisory personnel since the last evaluation;
 - (vi) Results and effectiveness of the Plant Safety Review Committee (PSRC);
 - (vii) Status of plant as compared to other BWR startups based on the subcommittee's knowledge and experience.

Reviews shall be conducted prior to exceeding 50 percent of full power and within 30 days following completion of the 100 hour warranty run. The subcommittee shall be composed of a minimum of three professionals not employees of MP&L with experience which will be responsive to the concerns presented above. In conducting these evaluations, the subcommittee shall conduct interviews of representatives of all levels of plant staff management. The subcommittee shall report directly to the Chairman of the Corporate Safety Review Committee and, in turn, MP&L shall submit the report of these reviews to NRC.

- (b) The Plant Safety Review Committee shall review all Unit 1 Preoperational Testing and System Demonstration activities performed concurrently with the Unit 1 Startup Test Program to assure that the activity will not affect the safe performance of the portion of the Unit 1 Startup Program being performed. The review shall address, as a minimum,

system interaction; span of control, staffing, procedures, security and health physics, with respect to performance of the activities concurrent with the portion of the Unit 1 Startup Program being performed.

(5) Deferred Preoperational Deficiencies

MP&L shall satisfactorily resolve those deficiencies which were deferred from the preoperational testing program on a schedule that shall assure that the capability of a system required to be operable by Technical Specification is not degraded.

(6) Soil Structure Interaction (Section 3.7.1, SER, SSER #2)

Prior to startup following the first refueling outage, MP&L shall complete structural modifications, if required, as a result of the NRC staff's completion of its review of MP&L responses.

(7) Seismic Instrumentation (Section 3.7.4, SER, SSER #2)

Prior to startup following the first refueling outage, the installation of triaxial strong motion accelerometers on reactor supports shall be completed.

(8) Masonry Walls (Section 3.8.3, SER, SSER #2)

Prior to startup following the first refueling outage, MP&L shall complete structural modifications, if required, as a result of the NRC staff's completion of its review of the MP&L response to IE Bulletin 80-11.

(9) Dynamic Testing (Section 3.9.2, SER, SSER #2, SSER #4, SSER #5)

MP&L shall conduct vibrational measurement and inspection programs during preoperational and initial startup testing in accordance with the guidelines of R.G. 1.20, "Comprehensive Vibration Assessment Program for Reactor Internals During Preoperational and Initial Startup Testing," for prototype reactors. An evaluation report demonstrating satisfactory results shall be provided to the NRC for review and approval no later than 6 months after completion of the startup test program.

(10) Dynamic Qualification (3.10, SER, SSER #1, SSER #2, SSER #4, SSER #5)

(a) Prior to startup following the first refueling outage, MP&L shall complete any modifications or replacement of equipment found necessary as a result of the fatigue evaluation. In

the interim, MP&L shall document the occurrence of every safety relief valve actuation into the suppression pool; the associated cumulative damage factors shall be calculated for typical representative equipment and kept up-to-date; and MP&L shall report to NRC any malfunction of equipment that occurs due to any safety relief valve discharge.

- (b) MP&L shall perform an in-situ test of the High Pressure Core Spray (HPCS) service water pump and evaluate the effects of flow induced vibration on the HPCS service water pump. This evaluation shall be provided to the NRC for review and approval. Prior to startup following the first refueling outage, MP&L shall complete all modifications as a result of the NRC staff's review of the test results and evaluation.
 - (c) Prior to actual use in fuel handling operations, MP&L shall qualify the fuel-handling and auxiliary platform, in-vessel rack, and storage container for defective fuel.
- (11) Environmental Qualification (Section 3.11, SER; SSER #1; Appendix H, SSER #2; SSER #5)
- Prior to March 31, 1985, MP&L shall environmentally qualify all electrical equipment as required by 10 CFR 50.49.
- (12) Surveillance of Control Blade (Section 4.2.3.14, SER)
- Within 30 days after plant startup following the first refueling outage, MP&L shall comply with items 1, 2 and 3 of Bulletin No. 79-26 and submit a written response to NRC on item 3.
- (13) Core Stability Analysis and Prohibition of Natural Circulation (Section 4.4.1, SER)
- (a) Prior to startup following the first refueling outage, MP&L shall submit a new core stability analysis for operation beyond cycle 1.
 - (b) Natural circulation shall be prohibited as an operating mode.
- (14) Loose Parts Monitoring (Section 4.4.1, SER)
- Prior to startup following the first refueling outage, MP&L shall submit an evaluation of the Loose Parts Monitoring System to address conformance to R.G. 1.133, Rev. 1, dated May 1981.

(15) Scram Discharge Volume (Sections 4.6, SER)

Prior to startup following the first refueling outage, MP&L shall incorporate the following additional modifications into the scram discharge volume system:

- (i) Redundant vent and drain valves, and
- (ii) Diverse and redundant scram instrumentation for each instrumented volume, including both delta pressure sensors and float sensors.

(16) Containment Purge (Section 6.2.4, SSER #5)

Prior to startup following the first refueling outage, MP&L shall provide for NRC review a reevaluation of the need to use the containment purge mode of the containment cooling system. This study should include, but is not limited to, data gathered during the first fuel cycle related to airborne activity level (ALARA), overall containment air quality and personnel access to containment. Based on the above cited study, MP&L shall propose the purge criteria to be used for the remainder of the plant life.

(17) Containment Pressure Boundary (Section 6.2.8, SER)

Prior to startup following the first refueling outage, MP&L shall replace the feedwater check valve disc with a disc made from a suitable material.

(18) Pressure Interlocks on Valves Interfacing at Low and High Pressure (Section 6.3.4, SSER #2)

Prior to startup following the first refueling outage, the licensee shall implement isolation protection against overpressurization of the low pressure emergency core cooling systems (RHR/LPCI and LPCS) at the high and low pressure interface containing a check valve and a closed motor-operated valve.

(19) IE Information Notice 79-22, Qualification of Control System (Section 7.8.C, SER, SSER #2)

Prior to startup following the first refueling outage, MP&L shall complete any design changes found necessary as a result of this review.

(20) Standby Service Water System (Section 9.2.1 SER, SSER #2)

No irradiated fuel may be stored in the Unit 1 spent fuel pool prior to completion of modifications to the standby service water

(SSW) system and verification that the design flow can be achieved to all SSW system components. However, should a core offloading be necessary prior to completion of these modifications (scheduled for the first scheduled refueling outage), irradiated fuel may be placed in the spent fuel pool when the RHR system operating in the spent fuel pool cooling mode is available. Until the SSW system is modified, the spent fuel pool cooler shall be isolated from the SSW system by locked closed valves. The position of these valves shall be verified every 31 days until the design flowrate for SSW system is demonstrated.

(21) Spent Fuel Pool Ventilation System (Section 9.4.7, SER, SSER #2)

If spent irradiated fuel is placed in the spent fuel pool prior to installation and operability of the safety related backup fuel pool cooling pump room coolers, the plant shall be placed in shutdown condition and remain shutdown with the RHR system dedicated to the fuel pool cooling mode.

(22) Remote Shutdown Panel (Section 9.5.4.1, SER, SSER #2)

Prior to startup following the first refueling outage, MP&L shall install electrical isolation switches between the control room and the Division 1 remote shutdown panel.

(23) Fire Protection Program (Section 9.5.9, SER)

MP&L shall maintain in effect and fully implement all provisions of the approved Fire Protection Plan. In addition, MP&L shall maintain the fire protection program to meet the intent of Appendix R to 10 CFR Part 50, except that an oil collection system for the reactor coolant pump is not required.

(24) Interplant Communication Systems (Section 9.6.1.2, SER, SSER #2, SSER #4, SSER #5)

Tests of the communication systems used to mitigate the consequences of an event and attain a safe plant shutdown shall be completed during preoperational and startup tests. An evaluation of the test results shall be provided for NRC review within 90 days after test completion. Any system modifications found necessary as a result of NRC review shall be completed prior to startup following the first refueling outage.

(25) Reliability of Diesel-Generators (Sections 8.3.1, 9.6.3 through 9.6.7, SER, SSER #2, SSER #4, SSER #6)

- (a) Prior to startup following the first refueling outage, a heavy duty turbocharger gear drive assembly shall be installed on all EMD diesel-generators.

- (b) Final evaluations and recommendations from the TDI Owners Group Program applicable to GGNS Unit 1, and MP&L's actions in response to this program for the standby diesel generators shall be submitted for NRC review and approval prior to startup following the first refueling outage.

(26) Turbine Disc Integrity (Section 10.2.1, SER, SSER #1)

During each refueling outage MP&L shall ultrasonically inspect the bores and keyways of the low pressure turbine discs for indications of cracking. All unacceptable indications and their dispositions shall be reported prior to startup for the next cycle of operation. These inspections shall continue until the potential for turbine disc cracking has been assessed and an acceptable alternate inspection schedule has been established.

(27) Circulating Water System (Section 10.4.5, SER)

MP&L shall not fill the Unit 2 circulating water system (including the natural draft cooling tower basin) until Unit 1 flooding concerns related to this system are resolved to the satisfaction of the NRC staff.

(28) Advisor to Vice President (Section 13.1.1, SER, SSER #2, SSER #4, SSER #5)

MP&L shall provide one or more additional staff members, reporting directly to a Vice President principally in charge of nuclear operations, who have substantial commercial nuclear power plant operating management experience and who will act as advisors to the vice president on all decisions affecting safe operation of the plant. The additional staff members may be permanent employees or contracted consultants, but they shall be retained in this advisory position until the plant has operated for at least 6 months at power levels above 90% of full power.

(29) Operating Shift Advisor (Section 13.1.2, SER)

At least one individual on each operating shift shall have substantive previous BWR operating experience, including startup and shutdown of a BWR and under conditions that one might expect to encounter during the initial startup and power escalation at the Grand Gulf plant. This individual is not required to be licensed on Grand Gulf Unit 1 and need not be an MP&L employee, but as a minimum shall be retained on a contract basis to act as a consultant or advisor to the GGNS shift crew. Such an experienced person shall be assigned to each operating shift until the plant achieves and demonstrates full power operation.

(30) Training Instructors (Section 13.2, SER)

Permanent training center instructors and consultants assigned to training, who, after initial criticality will teach systems, integrated responses, transients, and simulator courses to license candidates or NRC-licensed personnel, shall either demonstrate or have previously demonstrated their competence to the NRC staff by successful completion of a senior operator examination prior to teaching licensed operators.

(31) Initial Test Program (Section 14, SER)

MP&L shall conduct the post-fuel-loading initial test program (set forth in Section 14 of MP&L's Final Safety Analysis Report, as amended) without making any major modifications of this program unless such modifications have been identified and have received prior NRC approval. Major modifications are defined as:

- (a) Elimination of any test identified in Section 14 of MP&L's Final Safety Analysis Report, as amended, as being essential;
- (b) Modification of test objectives, methods or acceptance criteria for any test identified in Section 14 of MP&L's Final Safety Analysis Report, as amended, as being essential;
- (c) Performance of any test at a power level different from that described in the program; and
- (d) Failure to complete any tests included in the described program (planned or scheduled for power levels up to the authorized power level).

(32) Partial Feedwater Heating (Section 15.1, SER, SSER #2)

Operation of the plant in the partial feedwater heating mode for the purpose of extending the normal fuel cycle shall be prohibited until analyses which justify that operation are provided to and approved by the NRC staff.

(33) NUREG-0737 Conditions (Section 22.2)

MP&L shall complete the following conditions to the satisfaction of the NRC. These conditions reference the appropriate items in Section 22.2, "TMI Action Plan Requirements for Applicants for Operating Licenses", in the Safety Evaluation Report and Supplements 1, 2, 3, 4, and 5 NUREG-0831.

- (a) Control Room Design Review (I.D.1, SER; Appendix E, SSER #2, SSER #4, SSER #5)

Prior to startup following the first refueling outage, MP&L shall demonstrate the ability to maintain an "effective temperature" condition of 85°F or less in the remote shut-down panel (RSP) room for at least 8 hours with an ambient outdoor temperature of at least 95°F.

- (b) Training During Low-Power Testing (I.G.1, SER)

MP&L shall conduct a special test, Simulated Loss of Onsite and Offsite Alternating-Current Power Test, as described in the MP&L letter dated August 18, 1981. At least 4 weeks prior to performing the Special Test, MP&L shall provide a safety analysis for this test and its procedures to NRC for review and approval.

- (c) Post Accident Sampling (II.B.3, SER, SSER #1, SSER #4, SSER #5)

Prior to startup following the first refueling outage, MP&L shall incorporate the additional requirements into the procedure for relating radionuclide gaseous and ionic species to estimate core damage as discussed in Section II.B.3.1 of SSER #4.

- (d) Hydrogen Control (Section II.B.7, SER, SSER #2, SSER #3, SSER #4, SSER #5)

(1) During the first cycle of operation, MP&L shall maintain a suitable program of analysis and testing of the installed hydrogen ignition system. MP&L shall submit to the NRC quarterly reports on the status of their research programs.

- (a) MP&L shall amend its research program on hydrogen control measures to include, but not be limited to, the following items:

- 1) Perform containment sensitivity analysis to determine the adequacy of the hydrogen control system for a spectrum of degraded core accidents including the determination of accident sequences for which equipment survivability is assured;

- 2) Research to investigate the conditions leading to and consequences resulting from hydrogen combustion in the wetwell and containment. Testing shall be performed in a larger scale facility such as the one-quarter scale test facility proposed by MP&L;
 - 3) Research to investigate the conditions leading to and consequences resulting from hydrogen combustion in the drywell;
 - 4) Confirmatory tests on thermal response of selected equipment exposed to hydrogen burns.
- (b) MP&L shall perform feasibility studies to examine the options for enhancing equipment survivability for essential equipment located in the vicinity of the suppression pool or other regions subjected to severe environments. The options to be studied in such feasibility studies shall include thermal shielding, additional cooling, and relocation of essential equipment.
- (2) Prior to startup following the first refueling outage, MP&L must obtain NRC approval that an adequate hydrogen control system for the plant is installed and will perform its intended function in a manner that provides adequate safety margins.
- (e) Instrumentation for Detection of Inadequate Core Cooling (II.F.2, SER, SSER #2)
- MP&L shall submit a report addressing the analysis performed by the BWR Owners' Group regarding additional instrumentation relative to inadequate core cooling and shall implement the staff's requirements after the completion of the staff's review of this report. These modifications shall be completed on a schedule acceptable to the staff.
- (f) Modification of Automatic Depressurization System Logic - Feasibility for Increased Diversity for Some Event Sequences (II.K.3.18, SER, SSER #2, SSER #4)
- Prior to startup following the first refueling outage, MP&L shall provide, for NRC review, justification for the timer delay settings, revisions to the emergency procedures

covering the use of the manual inhibit switch, proposed Technical Specification surveillance procedures for the timer and switch, and shall implement alternative logic modification (Option 4) of the automatic depressurization system.

(g) Qualification of ADS Accumulators (II.K.3.28, SSER #5)

Prior to startup following the first refueling outage, MP&L shall perform an integrated leak test on the ADS air system, perform sampling to establish instrument air quality, provide instrumentation to monitor ADS air receiver pressure, establish suitable surveillance procedures for the ADS air system and provide proposed changes to the Technical Specifications associated with the surveillance procedures.

(34) SRV Test Program (Section A-39, Appendix C, SER, SSER #1, SSER #2)

During Cycle 1, an inplant SRV test program shall be carried out to confirm that the containment building response to SRV loads is acceptable. Results of these tests shall be provided to NRC no later than four months after test completion.

(35) Post-LOCA Vacuum Breaker Position Indicators

Prior to startup following the first refueling outage, MP&L shall install position indicators with redundant indication and alarm in the control room for the check valves associated with the drywell post-LOCA vacuum breakers.

(36) Emergency Response Facilities (Generic Letter 82-33, NUREG-0737 Supplement 1, SSER #5)

MP&L shall complete the emergency response capabilities as required by Attachment 1 to this license.

(37) Evaluation of Licensee's Technical Specification Problem Sheets (Section 16.3, SSER #6)

Prior to startup following the first refueling outage, MP&L shall implement the following modifications:

- (a) Include an emergency override of the test mode of the Division 3 HPCS diesel generator to permit response to emergency signals and to return the control of the diesel generator to the emergency standby mode. (Item No. 333, T.S. 4.8.1.1.2.d.12.b).

- (b) Provide the second level undervoltage protection for Division 3 power supply (Item No. 373, T.S. Table 3.3.3-2).
- (c) Incorporate a bypass or coincident logic in all Division 1 and 2 diesel generator protective trips, except for trips on diesel engine overspeed and generator differential current (Item No. 808, T.S. 4.8.1.1.2.d.16.d).

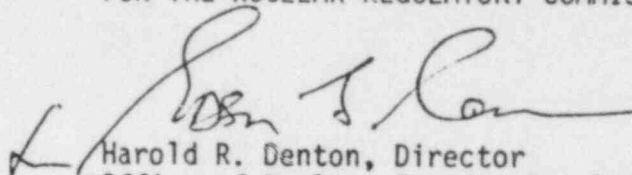
(38) Control Room Leak Rate (Section 6.2.6, SSER #6)

MP&L shall operate Grand Gulf Unit 1 with an allowable control room leak rate not to exceed 590 cfm. Upon restart of construction of Unit 2 control room, MP&L will be permitted to operate at a leak rate of 760 cfm as evaluated in SSER No. 6.

- D. The facility requires exemptions from certain requirements of Appendices A and J to 10 CFR Part 50. These include: (a) exemption from General Design Criterion 17 of Appendix A until startup following the first refueling outage, for (1) the emergency override of the test mode for the Division 3 diesel engine, (2) the second level undervoltage protection for the Division 3 diesel engine, and (3) the generator ground over current trip function for the Division 1 and 2 diesel generators (Section 8.3.1 of SSER #7) and (b) exemption from the requirements of Paragraph III.D.2(b)(ii) of Appendix J for the containment airlock testing following normal door opening when containment integrity is not required (Section 6.2.6 of SSER #7). These exemptions are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. Therefore, these exemptions are hereby granted pursuant to 10 CFR 50.12. With the granting of these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act and the rules and regulations of the Commission.
- E. MP&L shall maintain in effect and fully implement all the provisions of the Commission-approved physical security plan, guard training and qualification plan and safeguards contingency plan, including amendments made pursuant to the authority of 10 CFR Section 50.54(p). The approved plans, which are safeguards information protected under 10 CFR 73.21, are collectively entitled Grand Gulf Nuclear Station "Physical Security Plan," Revision 1, 2 and 3; the Grand Gulf Nuclear Station "Security Training and Qualification Plan," and the Grand Gulf Nuclear Station "Safeguards Contingency Plan." The identification of vital areas and measures used to control access to these areas, as described in the physical security plan, may be subject to amendments in the future based upon a confirmatory evaluation of the plant to determine those areas where acts of sabotage might cause a release of radionuclides in sufficient quantities to result in dose rates equal to or exceeding 10 CFR Part 100 guidelines.

- F. MP&L shall report any violations of the requirements contained in Section 2, Items C.(1), C.(4) through C.(38) of this license within twenty-four (24) hours. Initial notification shall be made in accordance with the provisions of 10 CFR 50.72 with written follow-up in accordance with the procedures described in 10 CFR 50.73(b), (c), and (e).
- G. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- H. This license is effective as of the date of issuance and shall expire at midnight on June 16, 2022.

FOR THE NUCLEAR REGULATORY COMMISSION


Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Attachments:

- 1. Attachment 1
- 2. Appendix A - Technical Specifications (NUREG-0934)
- 3. Appendix B - Environmental Protection Plan
- 4. Appendix C - Antitrust Conditions

Date of Issuance: November 1, 1984

Attachment 1

MP&L shall complete the following requirements on the schedule noted below:

Emergency Response Facilities (Generic Letter 82-33, NUREG-0737
Supplement 1, SSER #5)

MP&L shall implement the specific items below, in the manner described in MP&L letter (AECM-83/0232) dated April 15, 1983, as modified in MP&L letter (AECM-83/0486) dated August 22, 1983, no later than the following specified dates:

- (a) Safety Parameter Display System (SPDS)
- (1) Submit a safety analysis and an implementation plan to the NRC July 1985
 - (2) SPDS fully operational and operators trained Prior to startup following first refueling outage
- (b) Detailed Control Room Design Review (DCRDR)
- (1) Submit a program plan to the NRC December 1984
 - (2) Submit a summary report to the NRC including a proposed schedule for implementation July 1986
- (c) Regulatory Guide 1.97 - Application to Emergency Response Facilities
- (1) Submit a report to the NRC describing how the requirements of Supplement 1 to NUREG-0737 have been or will be met February 1985
 - (2) Implement (installation or upgrade) requirements of R.G. 1.97 with the exception of flux monitoring, coolant level monitoring, and SLCS flow monitoring. Prior to startup following first refueling outage
 - (3) Implement (installation or upgrade) requirements of R.G. 1.97 for flux monitoring, coolant level monitoring, and SLCS flow monitoring. Prior to startup following second refueling outage
- (d) Upgrade Emergency Operating Procedures (EOP's)
- (1) Submit a Procedures Generation Package to the NRC April 1985

(2) Implement the upgraded EOP's

Prior to startup
following the
first refueling
outage

(e) Emergency Response Facilities

(1) Technical Support Center fully functional
with exception of Regulatory Guide 1.97
implementation

Prior to startup
following the
first refueling
outage

(2) Operational Support Center fully functional
with exception of Regulatory Guide 1.97
implementation

Prior to startup
following the
first refueling
outage

(3) Emergency Operations Facility fully
functional with exception of Regulatory
Guide 1.97 implementation

Prior to startup
following the
first refueling
outage