

BEFORE THE  
UNITED STATES NUCLEAR REGULATORY COMMISSION

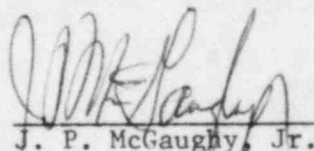
LICENSE NO. NPF-13

DOCKET NO. 50-416

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

AFFIRMATION

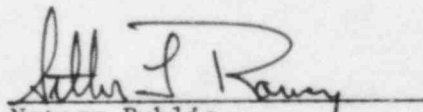
I, J. P. McGaughey, Jr., being duly sworn, stated that I am Vice President - Nuclear of Mississippi Power & Light Company; that on behalf of Mississippi Power & Light Company, Middle South Energy, Inc., and South Mississippi Electric Power Association I am authorized by Mississippi Power & Light Company 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 of Mississippi Power & Light Company; and that the statements made and the matters set forth therein are true and correct to the best of my knowledge, information and belief.

  
J. P. McGaughey, 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 7<sup>th</sup> day of APRIL, 1983.

(SEAL)

  
Notary Public

My commission expires:

13 FEBRUARY 1985

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P PDR

PROPOSED CHANGE TO THE OPERATING LICENSE NPF-13  
PCOL-83/05

Mississippi Power & Light (MP&L) requests that the operating license for Grand Gulf Nuclear Station (GGNS) (NPF-13) be amended as detailed below. These proposed changes, as discussed below, are provided for Nuclear Regulatory Commission (NRC) review and approval per 10 CFR 50.90.

A. SURVEILLANCE PROCEDURE REVIEW - PACKAGE NO. 2 (Items 1 through 21)

(GGNS - 13)

1. SUBJECT: Technical Specification 6.9.1.12, Section k, page 6-20.

DISCUSSION: Section k of Technical Specification 6.9.1.12 requires prompt notification with written followup when the limits are exceeded as specified in sections 3.11.2.4 or 3.11.2.6 for the storage of radioactive materials in the listed tanks. The technical specifications, however, do not pertain to storage of radioactive materials and are incorrect.

Section k should be amended to reference Technical Specification 3.11.1.4. Reference to Technical Specification 3.11.2.4 and 3.11.2.6 should be deleted.

JUSTIFICATION: Technical Specification 3.11.1.4 pertains to outside temporary storage of radioactive liquids and according to the Standard Radiological Environmental Technical Specifications is the correct reference. The second technical specification referenced, (3.11.2.6), is for gaseous holdup tanks which are not part of the GGNS Offgas Treatment System design. This second reference, therefore, should be deleted.

(GGNS - 96)

2. SUBJECT: Technical Specification 4.3.1.1 Table 4.3.1.1-1, page 3/4 3-8.

DISCUSSION: Note "h" which is appended to the channel check for item 2b in Surveillance Requirement Table 4.3.1.1-1 imposes a non-conservative setting for the APRM measured core flow. The text of note "h" should be revised as follows:

"Verify measured core flow to be less than or equal to established core flow at the existing flow control valve position."

JUSTIFICATION: The present wording of note "h" requires artificially increasing the core flow measurement produced by the APRM instruments so that measured flow exceeds core rated flow. This will correspondingly increase the associated trip setpoint with the result that a trip would occur at a power level higher

than that desired. In order for the setpoint to be conservative, the biasing signal (measured core flow) must be less than the established or actual value of core flow.

The APRM measured core flow should be periodically compared with some other measurement of actual core flow, and the APRM measured core flow should always be less than or equal to the actual core flow determined from this other measurement. This insures that the trip setpoint will be conservative with respect to the actual core flow.

(GGNS - 137)

3. SUBJECT: Technical Specification 3/4.4.6, pages 3/4 4-18 and 3/4 4-20.

DISCUSSION: The proposed withdrawal schedule for material surveillance specimens in Technical Specification Table 4.4.6.1.3-1, page 3/4 4-20, is not consistent with FSAR page 5.3-6, subparagraph 5.3.1.6.1. The FSAR withdrawal schedule is based on a 40-year useful design life, reference FSAR page 5.3-17, paragraph 5.3.3.1.3a and is in accordance with the requirements of 10 CFR 50, Appendix H. The Technical Specification withdrawal schedule indicates a design life of 32 years.

In addition there are discrepancies in the weld heat/Lot No. 627260/B322A27AE in both the FSAR and Technical Specification. The correct lot number is recorded in Technical Specification, page B 3/4 4-6, Basis Table B 3/4.4.6-1 as documented by the Vendor Certificate of Analysis. The incorrect lot number is located in the Technical Specification, page 3/4 4-18, paragraph 4.4.6.1.3b and FSAR Table 5.3-3, Beltline Plate and Weld RT<sub>NDT</sub> Values.

JUSTIFICATION: In order to correct discrepancies in the Reactor Vessel Material Surveillance Program for the reactor beltline region and to meet the requirements of 10 CFR 50, Appendix H and Appendix G, the corrections should be made to the Unit 1 Technical Specifications.

(GGNS - 150)

4. SUBJECT: Technical Specification Table 3.7.8-1, page 3/4 7-43.

DISCUSSION: The temperature limits for the area outside the drywell under item a, in Technical Specification Table 3.7.8-1 should be revised as follows:

	EQUIPMENT NOT OPERATING	EQUIPMENT OPERATING
Outside Drywell	80	105

JUSTIFICATION: Technical Specification Bases Section 3/4.7.8 states that the area temperature limits in the Technical Specifications are provided to ensure that safety related equipment will not be subjected to temperatures in excess of the equipment's environmental qualification temperature. The ambient temperatures used in Mississippi Power & Light Company's (MP&L) environmental qualification analysis for the containment without and with equipment operating are 80°F and 105°F as documented in MP&L's Response to NUREG-0588 Equipment Environmental Qualification Requirements: (AECM-81/231, dated July 7, 1981; AECM-81/335, Supplement 1, dated September 1, 1981; and AECM-81/502, Supplement 2, dated December 21, 1981). The technical specification temperature limits for the containment outside the drywell should be revised to agree with the temperatures specified for equipment environmental qualification.

(GGNS - 156)

5. SUBJECT: Surveillance Requirement 4.7.2, Section b.1, Pages 3/4 7-5 and 3/4 7-6.

DISCUSSION: Section b.1 of the above referenced surveillance requires verification of total bypass flow around the HEPA filters and the charcoal absorbers. This requirement is redundant to section b.2 which requires testing per Regulatory Guide 1.52. Regulatory Guide 1.52, Section 5.c, requires leak testing the HEPA filter section to ensure bypass leakage to be less than 0.05%, and Section 5.d requires leak testing of the carbon absorber section such that bypass leakage is less than 0.05%.

Surveillance Section b.1 should be deleted.

JUSTIFICATION: Surveillance Requirement 4.7.2, Section b.1 of the Standard Technical Specifications, (GE-STB-BWR/6), pertains to emergency filtration systems which have the capability of bypassing the HEPA and charcoal filters. The GGNS design is a single path system and does not incorporate bypass valves. For this reason and because the requirements of b.1 are met elsewhere in the surveillance requirement, the section should be deleted.

(GGNS - 187)

6. SUBJECT: Technical Specification 4.6.5.b.2.a, page 3/4 6-45a.

DISCUSSION: Note 1 of Surveillance Requirement 4.6.5.b.2.a requires verification that the pressure differential required to open the post-LOCA vacuum breakers is less than 1.0 psid. Further, it requires this verification test be performed using an equivalent test weight and lever arm. Due to interference with

valve operation, the lever arms have been removed from these valves. The latter requirement therefore imposes an unnecessary burden since other test methods are available (e.g. imposing a pressure differential across the valve). It is therefore requested that Note 1 and 4.6.5.b.2.a be modified by deleting the words "by use of an equivalent test weight and lever arm on the vacuum breaker". The revised text should read as follows:

"a) Verifying the pressure differential required to open the vacuum breaker, from the closed position, to be less than or equal to 1.0 psid, and"

JUSTIFICATION: The requested change will allow greater flexibility in selecting the method to be used in performing the required test. Also, since Note 1 is applicable only until restart after the first refueling outage, the requested change will allow the test methods used during the first fuel cycle to be consistent with those to be used thereafter.

(GGNS - 219a)

7. SUBJECT: Technical Specification 3/4.3.3, Table 3.3.3-2, Page 3/4 3-28.

DISCUSSION: Section B.1.c of the above referenced table lists the trip setpoint for the LPCI Pump B start time delay relay as less than or equal to 5 seconds\*\*. The double asterisk should be deleted from the response time.

JUSTIFICATION: The double asterisk is a typographical error. The reference does not exist as a footnote and is meaningless.

(GGNS - 281)

8. SUBJECT: Technical Specification Table 3.3.4.2-1, page 3/4 3-40.

DISCUSSION: Technical Specification Table 3.3.1-1 (RPS Instrumentation) items 10 and 11 (Turbine Stop Valve Closure and Turbine Control Valve Fast Closure) reference note h. Note h states: "This function shall be automatically bypassed when turbine first stage pressure is less than 30%\*\* of the value of turbine first stage pressure in psia, at valve wide open steam flow, equivalent to thermal power less than 40% of Rated Thermal Power". The "\*\*\*" references a subnote stating that the 30% is an initial setpoint and the final setpoint (i.e. the exact value of turbine first stage pressure corresponding to 40% Rated Thermal Power) is to be determined during startup testing. Items 1 and 2 of Table 3.3.4.2-1 (EOC RPT instrumentation) reference note b which is identical to note h, discussed above, except the "\*\*\*" subnote is not referenced. For consistency and clarity, the "\*\*\*" subnote should be added to note (b) of items 1 and 2 of Table 3.3.4.2-1.



JUSTIFICATION: The subnote, discussed above, already exists on Table 3.3.1-1 where the same trip instrumentation is referenced. This revision to Table 3.3.4.2-1 provides consistency and clarification.

(GGNS - 301, 306, 348)

9. SUBJECT: Technical Specification 3/4.8.1, Pages 3/4 8-3, 3/4 8-4, 3/4 8-5, 3/4/8-6 and 3/4 8-7.

DISCUSSION: Diesel Generator sets 11, 12, and 13 are designed to start and attain rated speed, voltage and frequency within 10 seconds. The generator, exciter, and voltage regulator are designed to permit the unit to accept the load and to accelerate the motors in the sequence and time requirements listed in FSAR Table 8.3-4.

The current technical specification requirement is 13 seconds rather than the 10 second start time which is within the design specification of the diesel generators. The subject technical specification should be revised to reflect 10 seconds start time to conform to the Grand Gulf Nuclear Station safety analysis value.

JUSTIFICATION: The current technical specification surveillance requirements for the diesel generator starting time is inconsistent with the Grand Gulf Safety Analysis as presented in FSAR Subsections 8.3.1.1.3.b, 8.3.1.1.4.1.d, and 9.5.6.1.1.b. The FSAR indicates that either of two signals, LOCA or loss of preferred power source, will result in starting of the diesel generator. The diesel will be automatically connected to the bus after the generator rated frequency and voltage are attained and all other incoming breakers are open. This requires 10 seconds maximum after receipt of the diesel engine start signal.

(GGNS - 308)

10. SUBJECT: Technical Specification 3.3.2, Table 3.3.2-3, pages 3/4 3-18 and 3/4 3-19.

DISCUSSION: Section 4.a of Table 3.3.2-3 lists the response time for the "Differential Flow-High" trip function of the Reactor Water Cleanup System Isolation as NA. It also refers to a footnote (##) which states that the response time is without the 45 second time delay. Since the response time is not applicable, the reference to the ## footnote and the footnote itself should be deleted.

JUSTIFICATION: The ## symbol should be deleted as a typographical error. It is meaningless since the response time is not applicable.

(GGNS - 321)

11. SUBJECT: Technical Specification 3/4.3.7.1, Table 3.3.7.1-1, Page 3/4 3-57 and Table 4.3.7.1-1, Page 3/4 3-59.

DISCUSSION: Sections 10.a of Table 3.3.7.1-1 and 4.3.7.1-1 list the area radiation monitors for the fuel handling area. The dryer storage area, which can be used for storage of fuel, is not included in this table. The dryer storage area should be added to this table along with a footnote which says "with fuel in the dryer storage area".

JUSTIFICATION: Because spent fuel may be placed in the dryer storage area during core alterations, and new fuel may be stored in this area prior to loading, the same radiation monitoring requirements are applicable for this area as for the new and spent fuel storage areas.

Area radiation monitors are already installed in the immediate area of the dryer storage area and will meet this requirement.

(GGNS - 340)

12. SUBJECT: Technical Specification 4.6.7.1, Page 3/4 6-57.

DISCUSSION: Section c of Surveillance Requirement 4.6.7.1 requires the hydrogen recombiner portion of the Combustible Gas Control System to be leak rate tested per the requirements of Technical Specification 3.6.1.2 or by measuring the leakage rate of the portion of the system outside the containment per Surveillance Requirement 4.6.1.2.

Section c should be deleted from 4.6.7.1 since this section is not applicable to Grand Gulf Nuclear Station.

JUSTIFICATION: The hydrogen recombiner portion of the Combustible Gas Control System consist of two free standing, fully self contained units with no associated ductwork or piping. These units are located entirely inside the containment and involve no containment penetrations other than electrical.

Surveillance Requirement 4.6.1.2 and the corresponding GGNS surveillance procedure direct the overall integrated leakage rate test and the containment penetrations local leakage rate test to be performed on the Combustible Gas Control System. Therefore, the surveillance requirements of Section 4.6.7.1.c are redundant and may be deleted.

(GGNS - 350)

13. SUBJECT: Technical Specification 4.8.1.1.2.d.9, page 3/4 8-6.

DISCUSSION: The last sentence of technical specification surveillance requirement 4.8.1.1.2.d.9 should be revised to read as follows:

"Within 5 minutes after completing this 24 hour test, perform Surveillance Requirement 4.8.1.1.2.d.7. a).2 and b).2)\*."

JUSTIFICATION: Surveillance requirement 4.8.1.1.2.d.9 specifies requirements for the diesel generator 24 hour test. The technical specifications presently require that following completion of the 24 hour test, the test simulating loss of offsite power must be repeated. This test is defined in surveillance requirement 4.8.1.1.2.d.4. This test does not result in application of any load to the diesel generator other than normal shutdown loads.

Regulatory Guide 1.108, to which Mississippi Power & Light committed in Appendix 3A of the Grand Gulf Nuclear Station Final Safety Analysis Report, specifies the requirements for conducting additional tests following the 24 hour test. The regulatory guide requires that tests simulating diesel generator starting due to loss of offsite power and demonstrating proper operation for the design loading sequence be performed immediately after the 24 hour test.

This regulatory guide requirement will be correctly implemented by the proposed change to the technical specifications. Surveillance requirement 4.8.1.1.2.d.7 specifies a test which simulates simultaneous loss of offsite power and ECCS actuation signals. These signals result in starting the diesel generators and loading the diesel generators with the appropriate emergency loads. This is the only test included in the technical specification surveillance requirement which meets both of the requirements specified in the regulatory guide.

(GGNS - 351)

14. DELETED



(GGNS - 399)

15. SUBJECT: Technical Specification 4.8.1.1.2.d.2, page 3/4 8-4.

DISCUSSION: Technical Specification surveillance requirement 4.8.1.1.2.d.2 should be revised so that the loads specified in this requirement are consistent with the largest single load which can be applied to the ESF busses during planned testing of the diesel generator. Surveillance requirement 4.8.1.1.2.d.2 should be revised to read as follows:

"Verifying the diesel generator capability to reject a load of greater than or equal to the load from the LPCS pump motor with the pump operating at rated flow of 7115 gpm for diesel generator 11, greater than or equal to the load from a single LPCI pump motor with the pump operating at rated flow of 7450 gpm for diesel generator 12, and greater than or equal to the load from the HPCS pump motor with the pump operating at rated flow of 7115 gpm for diesel generator 13 while maintaining less than or equal to 75% of the difference between nominal speed and the overspeed trip setpoint, or 15% above nominal, whichever is less."

JUSTIFICATION: The proposed revision is in compliance with Regulatory Guide 1.108 and specifically defines the single largest load for the purposes of overspeed testing. The loads presently included in surveillance requirement 4.8.1.1.2.d.2 are based upon extremely conservative assumptions regarding pump motor efficiency, ECCS system back pressure, and pump flow for the ECCS pump motors which represent the largest single load on each ESF bus. During planned surveillance testing of the diesel generators, it will not be possible to produce single loads on the ESF busses corresponding to the electrical loads included in surveillance requirement 4.8.1.1.2.d.2.

In accordance with Regulatory Position (Regulatory Guide 1.108), the proposed revision to the technical specifications defines single loads which can be tripped during surveillance tests for each diesel generator. The rated flows for each pump are identified in Grand Gulf Nuclear Station (GGNS) Final Safety Analysis Report (FSAR) Table 6.3-8 and in Technical Specification Surveillance Requirement 4.5.1.b. The pump

motors listed in the proposed revision to the technical specifications are the largest single loads on each ESF bus which can be verified in GGNS FSAR tables 8.3-1, 8.3-2 and 8.3-3.

(GGNS - 434)

16. SUBJECT: Technical Specifications Table 4.3.7.12-1, page 3/4 3-94.

DISCUSSION: Technical Specifications Table 4.3.8.12-1 requires the Offgas Post-Treatment Monitors surveillance be accomplished "at all times" as indicated by a single asterisk. Table 3.3.7.12-1, however, requires operability for the same instrument only during operation of the main condenser air ejector as indicated by a double asterisk.

The single asterisk in section 7 of Table 4.3.7.12-1 should be changed to a double asterisk to provide consistency between the two tables.

JUSTIFICATION: Surveillance is not necessary when the instrument is not required to be operable. Therefore, the surveillance requirement in Table 4.3.8.12-1 should be amended to reflect the operability requirement of Table 3.3.7.12-1.

(GGNS - 496)

17. SUBJECT: Technical Specification Table 4.3.7.11-1, page 3/4 3-85.

DISCUSSION: Technical Specification Surveillance Requirement Table 4.3.7.11-1 includes reference to note (4) for the flow rate measurement devices. The reference to note (4) should be deleted.

JUSTIFICATION: The table notation for Surveillance Requirement Table 4.3.7.11-1 does not include a note (4). No additional clarifications regarding the flow rate measurement devices are required. Therefore, the reference to note (4) in Table 4.3.7.11-1 should be deleted.

(GGNS - 503)

18. SUBJECT: Technical Specification Bases Section 3/4.6.1.5 and 3/4.6.1.6, page B3/4 6-2.

DISCUSSION: Bases Section 3/4.6.1.5, FEEDWATER LEAKAGE CONTROL SYSTEM and 3/4.6.1.6, CONTAINMENT STRUCTURAL INTEGRITY are incorrectly numbered as 3/5.6.1.5 and 3/5.6.1.6.

JUSTIFICATION: The Section numbers 3/5.6.1.5 and 3/5.6.1.6 should be numbered 3/4.6.1.5 and 3/4.6.1.6, respectively. This is a typographical error.

(GGNS - 542)

19. SUBJECT: Technical Specification 3.9.2.c, page 3/4 9-3.

DISCUSSION: Technical Specification 3.9.2.c presently states: "Prior to and during the time any control rod is withdrawn and shutdown margin demonstrations are in progress, either:" The requirement that Technical Specification Items 3.9.2.c.1 or 3.9.2.c.2 be implemented when control rods are withdrawn in conjunction with shutdown margin demonstrations is incorrect. Technical Specification Items 3.9.2.c.1 or 3.9.2.c.2 should be implemented prior to and during the time a control rod is withdrawn or when shutdown margin demonstrations are in progress.

JUSTIFICATION: The purpose of requiring implementation of Technical Specification Items 3.9.2.c.1 or 3.9.2.c.2 is to assure that either the SRM high flux scram and non-coincident IRM and APRM scram functions are available or that rod blocks from the Rod Pattern Control System, which prevents unsafe movements of control rods are functional. These functions should be operational anytime that a control rod is withdrawn in Mode 5. Since control rods can be withdrawn in Mode 5 for purposes other than shutdown margin demonstrations, the proposed change in the wording of Technical Specification Items 3.9.2.c should be implemented.

(GGNS-547)

20. SUBJECT: Technical Specification 3/4.5.1, page 3/4 5-1.

DISCUSSION: The "#" footnote at the bottom of page 3/4 5-1 references Special Test Exceptions 3.10.6 which does not exist in the Grand Gulf Technical Specification. The correct reference is 3.10.5.

JUSTIFICATION: Special Test Exception 3/4.10.5 allows Specification 3.5.1 to be suspended to permit one RHR subsystem to be aligned in the shutdown cooling mode during training startups. This specification is number 3.10.6 in the Standard Technical Specifications. The reference in Specification 3/4.5.1 to this specification was not changed when the Grand Gulf Nuclear Station Technical Specifications were submitted to the NRC for approval.

(GGNS - 596)

21. SUBJECT: Technical Specification 3/4.7.4, page 3/4 7-10.

DISCUSSION: Paragraph b of Section 4.7.4 contains a reference to Surveillance Requirement 4.6.4.e. This surveillance requirement is nonexistent. The correct reference is 4.7.4.e. The phrase should be revised to reflect the correct reference.

JUSTIFICATION: The reference to Surveillance Requirement 4.6.4.e is a typographical error. Surveillance Requirement 4.7.4.e describes the functional test acceptance criteria for mechanical snubbers and is the correct reference.

B. MISCELLANEOUS TECHNICAL SPECIFICATION CHANGE (ITEM 22)

22. SUBJECT: Technical Specification 6.5.2.8, page 6-11.

DISCUSSION: Revise Technical Specification 6.5.2.8 to give audit responsibility to the Manager of Quality Assurance, to reassign the responsibility for the evaluation of staff performance, and to provide for more frequent audits of the Security Plan.

JUSTIFICATION: The NRC approved Operational Quality Assurance Manual (OQAM) specifies that the Manager of Quality Assurance (MQA) has the responsibility for the MP&L audit program. The OQAM also specifies that an independent review of written reports be made by the SRC. Technical Specification 6.5.2.8 requires audits to be made of a list of activities by the SRC. To show a single responsibility for the conduct of audits, Technical Specification 6.5.2.8 should be revised.

Personnel performance should be the responsibility of supervisory individuals due to their close, frequent contact with the person being evaluated. MP&L maintains that audits are not appropriate tools for measuring performance due to the lack of objective evidence and the relatively short exposure time of the audit team to the personnel being appraised. The annual performance evaluation by appropriate management personnel is adequate to meet the appraisal requirements of Technical Specification 6.5.2.8.b. This section should be revised to reflect this position.

In accordance with 10 CFR 50.54(p) and 10 CFR 73.46(g)(6), The Security Plan should be audited at least once each 12 months. Thus, Technical Specification 6.5.2.8.f should be revised to be consistent with this requirement.