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. McGaughy, Jr., being duly sworn, stated that I am Assistant Vice President - Nuclear Production of Mississippi Power & Light Company; that on behalf of Mississippi Power & Light Company, Middle South Energy, Inc., and South Mississippi Electric Power Association I an 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 Assistant Vice President - Nuclear Production 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. McGaughy, 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 13 day of September, 1982.

(SEAL)

Notary Public

My commission expires:

February 13, 1985

PROPOSED CHANGE TO THE OPERATING LICENSE NPF-13
PCOL-82/10

Mississippi Power & Light (MP&L) requests that the operating license for Grand Gulf Nuclear Station (NPF-13) be amended as indicated below:

1) Technical Specification Table 3.6.4-1, Valve E12-F021B-B

2) Technical Specification 4.5.1.C.2.a

3) Technical Specification Table 3.3.8-2

4) Technical Specification Table 3.8.4.1-1

5) Technical Specifications 3.9.4.1 and 3.9.4.2.

These proposed changes, as described below, are provided for NRC review and approval per 10 CFR 50.90.

1) SUBJECT:

Table 3.6.4-1 "Containment and Drywell Isolation Valves", Valve E12-F021B-B, Page 3/4 6-30. See attached marked page.

DISCUSSION:

A design change to the subject valve was made during plant construction to allow for a throttling application. (This valve is used to throttle flow in the RHR "C" test line to the suppression pool.) Due to this change the vendor specified closure time increased. The related technical specification should be revised to reflect this design change. The vendor specified maximum closure time is 101 seconds.

JUSTIFICATION:

The technical specifications should be revised to be consistent with the valve vendor's specification for maximum allowable closure time.

The NSSS supplier's design specification requirements for this system indicate that the closing speed of valves in system test lines need not be greater than the vendor's standard speed. This requirement is met in that the closure time of 101 seconds is a vendor calculated value based on the standard closure speed (4 inches/minute for globe valves). The design basis, as detailed in the NSSS supplier's design specification, is that the RHR system is not required to recover from secondary modes of operation, such as testing, within the specified LPCI injection time, because the interval of time the RHR system remains in these secondary modes is so short that the effect on overall reliability is insignificant.

It should also be noted that the above closure time is the maximum allowable from the full open position. Since this valve is used in a throttling application, it will normally be in a position that is less than full open, thus resulting in shorter time interval to full closed, should the need arise.

2) SUBJECT:

Technical Specification surveillance requirement 4.5.1.C.2.a. See attached marked pages.

DISCUSSION:

The current technical specification surveillance requirements for the ECCS discharge line "keep filled" pressure alarm setpoints are not plant specific and require revision as indicated on the attached pages 3/4 5-4 and 3/4 5-5 of Technical Specification 4.5.1. Only the low pressure setpoints are affected. The high pressure alarm setpoints are correct as currently specified.

In addition to revising the low pressure setpoints, certain administrative changes were made for clarification purposes to distinguish between high and low pressure setpoints.

JUSTIFICATION:

The subject low pressure alarm setpoints should be revised to reflect the indicated Grand Gulf plant specific values.

3) SUBJECT:

Technical Specification Table 3.3.8-2 "Plant Systems Actuation Instrumentation Setpoints." See attached marked pages.

DISCUSSION:

The current technical specification for containment spray timers, as presented in the subject table, are generic values and are not consistent with the Grand Gulf safety analysis, as presented in FSAR subsection 6.2.1.1.5.5.

The FSAR, as referenced above, indicates that the containment spray trains are assumed to initiate no sooner than 10 minutes following an accident and no later than 13 minutes after the accident. However, the current technical specifications require that the Train A trip setpoint and allowable value be less than or equal to 10 minutes.

Grand Gulf specific calculations have been performed and the resulting values for Trains A and B are indicated in the attached revised Table 3.3.8-2, page 3/4 3-99. The calculations take into

account the FSAR requirements stated above, the maximum allowed spray valve opening time, and instrumentation repeatability and tolerance. The revised values are summarized below (in minutes):

Containment Spray Timers	Trip Setpoint	Allowable Value
Train A	10.3 ± .1	10 + 1.7, -0
Train B	11.2 ± .2	11.5 + .2, -1.5

It should be noted that in the automatic initiation mode, Train B is designed to initiate 90 seconds after Train A. This 90 second delay is accomplished by an additional timer. The initiation of Train B is thus effected by two sequential timers.

JUSTIFICATION:

As indicated above, the current subject technical specifications should be revised to plant specific values, consistent with the safety analysis, as presented in FSAR subsection 6.2.1.1.5.5.

4) SUBJECT:

Technical Specification Table 3.8.4.1-1 "Primary Containment Penetration Conductor Overcurrent Protective Devices." (Due to the repetitive nature of the proposed revision, only page 3/4 8-38 is attached.)

DISCUSSION:

The subject technical specification table currently indicates required response time for molded case circuit breakers which are incorrect for breaker types employed in the Grand Gulf design. An engineering analysis was conducted to insure that longer response times are appropriate and to assure that components protected by these breakers continue to function as designed. For circuit breakers listed in Table 3.8.4.1-1, Section 2 (Type NZM), the maximum allowable response time should be increased to 0.1 seconds. This proposed change affects pages 3/4 8-22 through 3/4 8-37. In addition certain administrative changes are requested for Section 3 (Type MSCP isolation devices) per the attached page 3/4 8-38. This change revises the fuse types used in the Grand Gulf design.

For a worst-case condition, a limiting factor is the heating of a #1/0 penetration pigtail in 0.147 seconds to 250 C. Type NZM molded case circuit breakers will respond in less than 0.100 seconds, within the worst-case condition time limit.

JUSTIFICATION:

A change of response time for Type NZM molded case units to 0.100 seconds will not adversely affect the penetration pigtails, transformers or motors and is consistent with the manufacturer's specification. A change of Technical Specification response time to reflect 0.100 seconds is, therefore, appropriate.

5) SUBJECT:

Technical Specifications 3.4.9.1 and 3.4.9.2, RHR Operability During Hot and Cold Shutdown Conditions.

DISCUSSION:

Both of the subject specifications currently require that at least one shutdown cooling mode loop be in operation during hot and cold shutdown, regardless of the status of the recirculation pumps.

It is proposed that the subject specifications be revised to identify an operating recirculation pump as an acceptable alternate to an RHR shutdown cooling loop in operation. This revision has been made in the attached marked versions of Specifications 3.4.9.1 and 3.4.9.2.

JUSTIFICATION:

Two major concerns in the specification's bases (page 3/4 4-5) are heat removal capability and provisions for adequate mixing within the RPV.

The subject specifications require that two loops of RHR shutdown cooling be OPERABLE; this requirement provides assurance that decay heat removal capability exists, if needed.

Regarding adequate mixing, in fact, the recirculation pumps are preferable to a shutdown cooling loop in operation due to the higher flow rates and the more direct "through the core" flow path provided by the recirculation pump. (Shutdown cooling uses a smaller pump, RHR, and takes suction off of the recirculation suction, discharging to feedwater lines.) RHR shutdown cooling is effective in providing mixing; however, the recirculation pump offers obvious advantages in assuring the coolant within the RPV is adequately mixed.