

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

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

Operating License Condition Item 2.C(42)h to be added as follows:

- h. The provisions of Specifications 2.1.4; 3.3.2, Table 3.3.2-1, Item 3.a; 3.3.3, Table 3.3.3-1; applicable portions of 3.6.6 (as referenced by Note (h) of Table 3.3.2-1), 3.9.8; 3.9.9 and 3.9.11 may be suspended for the purpose of installing protective sleeves on the Bottom Entry Incore Assemblies.

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

1. SUBJECT:

A one-time suspension of the above listed specifications is requested for the purpose of installing protective sleeves on the Bottom Entry Incore (BEI) Assemblies.

2. DISCUSSION:

During initial fuel loading operations at Grand Gulf Nuclear Station - Unit 1 (GGNS - 1), five Bottom Entry Incore (BEI) Assemblies, Local Power Range Monitoring (LPRM) Assemblies, were damaged and had to be replaced because the square shoulders of the fuel channels hung up on the top end of the BEI cover tube when the fuel bundle was lowered off center.

In order to preclude such damage to BEI assemblies when a fuel bundle is lowered off center, MP&L intends to install protective sleeves over the top end of the BEI assemblies. These protective sleeves will allow the square shoulders of the channel to slide over the existing shoulder, thereby preventing hangup and potential damage to LPRMs.

The procedure for performing the necessary work will require the reactor vessel water level to be lowered to eighteen (18) inches below the top fuel guide. This level is well below the actuation set points for isolating actuation instrumentation and Emergency Core Cooling System (ECCS) actuation instrumentation.

Temporary suspension is requested for Specifications as listed below:

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PDR ADOCK 05000416  
P PDR

L20rgl

<u>Technical Specification</u>	<u>Description and Comments</u>
a) 3.3.2, Table 3.3.2-1, Item 3.a.	Isolation Actuation Instrumentation - Primary containment isolation instrumentation is currently excepted under Operating License Condition 2.C(42). Relief from secondary containment isolation instrumentation is required to perform this modification to prevent the unnecessary isolation of secondary containment while vessel water level is below the isolation setpoint.
b) 3.3.3 and Table 3.3.3-1	Emergency Core Cooling System Actuation Instrumentation - Temporary relief from this specification is required to prevent the unnecessary actuation of ECCS with RPV water level below the normal initiation point. This design modification can not be performed with ECCS injecting. Measures will be taken to prohibit an inadvertent initiation while water level is lowered to prevent possible equipment damage and insure personnel safety. Manual initiation can be restored in a timely manner, providing significant makeup capability, if required.
c) 3.6.6, (As referenced from Note (h), Table 3.3.2-1)	Secondary Containment. Relief has been requested for certain isolation actuation instrumentation, as described in item a) above. Relief from this actuation instrumentation impacts the operability of secondary containment isolation dampers and valves. Therefore, for consistency, relief is requested for those portions of Specification 3.6.6 which are impacted by Note (h) of Table 3.3.2-1, i.e., the actuation instrumentation for those dampers and valves normally isolated on a low reactor water level signal.
d) 3.5.2	ECCS Shutdown - Temporary relief from this specification is requested for this same reasoning presented in item b) above.
e) 2.1.4	Reactor Vessel Water Level - Relief is requested from this specification because water level must be lowered to accomplish the subject modification. Decay heat considerations discussed in the basis for this safety limit are not appropriate for this time in core life due to the extremely low power history. See Section 3 below.
f) 3.9.8 and 3.9.9	Water Level - Reactor Vessel - Relief from these specifications is requested because water level must be lowered to accomplish the subject modification.

g) 3.9.11

Residual Heat Removal and Coolant Circulation - This specification requires a shutdown cooling loop in operation. Relief from this requirement is requested to ensure personnel and equipment safety while accomplishing the subject design modification. This modification requires personnel access to the vessel top guide, internal to the RPV. The cooling water discharging from shutdown cooling (feedwater sparger) represents a personnel hazard and impediment to the modification activity. As discussed in Section 3 below, the cumulative core power history, and associated decay heat is considered negligible; thus, there is no technical basis at this time for an operational shutdown cooling loop.

### 3. JUSTIFICATION:

To date, the extent of critical operations for GGNS has been limited to low power physics testing. This testing was conducted in August, 1982. During this testing the fuel in the GGNS core remained well below a conservatively estimated power level of 0.06 megawatts thermal (MWth).

MP&L requests temporary relief from the above requirements on the basis that the power history of the GGNS core has resulted in a negligible fission product inventory and associated decay heat generation rate.

Following the carefully controlled evolution of lowering the water level to eighteen (18) inches below the top fuel guide, no other evolution with a potential for draining the core will be allowed until the completion of the sleeve installation procedure and the restoration of normal water level. The capability of manually injecting water into the reactor vessel will remain unimpaired.

The current maintenance outage is the most opportune time for this maintenance to be accomplished, based primarily on ALARA considerations. Temporary relief from the above discussed specifications is required to provide proper conditions for the sleeve installation and to secure certain normally operating equipment to reduce the potential hazard to equipment and personnel. In accomplishing this task, however, there is reasonable assurance that the public health and safety is not adversely affected, primarily based on the minimum extent of critical operations conducted to date.

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

Operating License Condition Item 2.C(42)i to be added as follows:

- i. the provisions of Specification 3.9.11 may be suspended for the purpose of replacing startup sources.

This proposed change, as discussed below, is provided for NRC review and approval per 10 CFR 50.90.

1. SUBJECT:

A one time suspension of Specification 3.9.11 is requested for the purpose of replacing startup sources.

2. DISCUSSION/JUSTIFICATION

Startup source replacement is planned for GGNS shortly after the protective sleeve installation on bottom entry incore assemblies, discussed in Item A above. Water level will be at normal levels for this evolution.

Specification 3.9.11 requires at least one shutdown cooling loop in operation. Turbulence caused by shutdown cooling operation creates interference with cameras and other equipment involved in the source replacement. As a result, the task of full core, bundle location verification is more difficult.

As discussed in Item A above, the amount of decay heat from the low power physics testing conducting in August, 1982, is extremely low; and therefore, MP&L contends that there is no need for a shutdown cooling loop in operation. One time relief from this requirement is requested for this maintenance activity.