



Louisiana Power & Light Company  
317 Baronne Street  
P. O. Box 60340  
New Orleans, LA 70160-0340  
Tel. 504 595 2805

R. F. Burski  
Nuclear Safety & Regulatory Affairs-  
Manager

W3P90-0219  
A4.05  
QA

January 29, 1990

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Subject: Waterford 3 SES  
Docket No. 50-382  
License No. NPF-38  
NRC Bulletin 89-03

Gentlemen:

NRC Bulletin 89-03, Potential Loss of Required Shutdown Margin During Refueling Operations, was issued November 21, 1989. The bulletin addresses the potential for loss of required shutdown margin during the movement and placement of highly reactive fuel during refueling operations.

The NRC had previously issued Information Notice 89-51 of the same subject on May 31, 1989. In response to the information notice, LP&L reviewed the concerns for applicability to Waterford 3. Although no conditions like that described had been encountered, appropriate measures have been employed to prevent such a situation from occurring at Waterford 3.

Attachment 8.1 of Procedure RF-005-001, Fuel Movement, provides guidelines for development of the fuel shuffle sequence. These guidelines were revised to incorporate provisions to ensure that intermediate core configurations which result during a shuffle sequence are not more reactive than the final Beginning of Cycle (BOC) core configuration on which shutdown margin calculations are based. This revision to RF-005-001 was approved September 30, 1989, prior to the third refueling outage.

In Bulletin 89-03, all PWR licensees are required to:

1. Assure that any intermediate fuel assembly configuration (including control rods) intended to be used during refueling is identified and evaluated to maintain sufficient refueling boron concentration to result in a minimum shutdown margin of approximately 5%.

2. Assure that fuel loading procedures only allow those intermediate fuel assembly configurations that do not violate the allowable shutdown margin and that these procedures are strictly adhered to.
3. Assure that the staff responsible for refueling operations is trained in the procedures recommended in Item 2 above and understand the potential consequences of violating these procedures. This training should include the fundamental aspects of criticality control with higher enriched fuel assemblies.

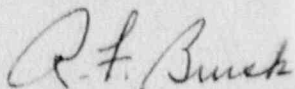
The requirements of actions 1 and 2 are adequately addressed in refueling procedure RF-005-001, Revision 1. Instructions for determining an acceptable refueling boron concentration are provided in Attachment 8.6 of RF-005-001. Guidelines for developing a fuel shuffle sequence that satisfies the concerns of the bulletin and notice are provided in Attachment 8.1 of RF-005-001.

With respect to action 3, training on procedure RF-005-001, Revision 1, which contains the information and guidelines to ensure the required shutdown margin is maintained, will be provided to operations personnel. To reinforce the need for strict adherence to the refueling procedure and fuel shuffle sequence, the training department plans to add to its refueling procedure lesson plan, a section addressing NRC Bulletin 89-03 and the concerns expressed therein.

Should there be any questions concerning this response, please contact L.W. Laughlin, Site Licensing Supervisor, at (504) 464-3499.

This response is submitted as required under affidavit under provisions of Section 182a of the Atomic Energy Act of 1954, as amended and 10CFR50.54(f).

Very truly yours,



RFB/DMU/ssf

cc: Messrs. R.D. Martin, NRC Region IV  
F.J. Hebdon, NRC-NRR  
D.L. Wigginton, NRC-NRR  
E.L. Blake  
W.M. Stevenson  
NRC Resident Inspectors Office



My Commission expires With Life