APR 7 1983

Distribution:

Docket File (50-382)

LB #3 Rdq

Docket No. 50-382

Mr. L. V. Maurin Vice President Nuclear Operations Louisiana Power & Light Company 142 Delaronde Street New Orleans, Louisiana 70174

NRC PDR L PDR NSIC PRC System GKnighton JLee JWilson OELD ACRS (16) ELJordan JMTaylor

Dear Mr. Maurin:

The deficiency described in your September 3, 1982 letter (Ref. 1) regarding the failure of the Waterford-3 CPC software to apply the failed -CEAC penalty factor to the local power density (LPD) as required by the functional specification has caused staff concern. In Question 10 of "Request for Additional Information Regarding Waterford-3 CPC" of our February 10, 1983 letter (Ref. 2), we have indicated that the deficiency should be corrected.

Your "Supplement to Waterford-3, Cycle 1 CPC/CEAC PHASE II Software Verification Test Report" submitted with your January 27, 1983, letter (Ref. 3) provided a quality assurance analysis result regarding the LPD PF deficiency and concluded that the current CPC software is acceptable for operation without the application of the penalty factor to the LPD calculation. However, the staff believes that the nature of the CPC software protection logic is not amenable to an evaluation or test program which can provide complete assurance that all circumstances requiring LPD trip protection have been adequately analyzed. Even if your conclusion is valid, the staff believes that the error degrades the protection provided by the CPCs by effectively eliminating one software trip path to the protection circuit. We therefore conclude that the current Waterford-3 CPC software is unacceptable with the LPD PF deficiency uncorrected. The postponement, expressed in your January 27, 1983 letter, of the correction of the CPC software error until the next planned CPC software modification prior to first reload is not acceptable.

We will require that the CPC software be corrected to conform to its design specifications prior to issuing an operating license. Alternatively, if the software correction cannot be implemented prior to fuel load, we will accept a commitment from you to complete this correction prior to operation above the 5 percent power level and will condition your license to reflect your commitment.

GKnighton 3/31/83

Sincerely,

Original signed by: Thomas M. Novak

Thomas M. Novak Assistant Director

1				for Licensing	
OFFICE	LB#30H2		ALL I	Division of Lidensing	
SURNAME à	JWilson:ms	Rubenstein		Office of Nuclear Reactor Regulation	
		-3 /3//83	417183		
DATE	611711111111111111111111111111111111111	********************	·		

NRC FORM 318 (10-80) NRCM 0240

8304220010 830407 PDR ADDCK 05000382 A PDR

OFFICIAL RECORD COPY

USGPO: 1981-335-960

References:

- Letter from L. V. Maurin (LP&L) to R. L. Tedesco (NRC), "Waterford Steam Electric Station - Unit No. 3, Docket No. 50-382, CPC Software Functional Inconsistency," September 3, 1982.
- Letter from G. Knighton (NRC) to L. V. Maurin (LP&L), "Request for Additional Information Concerning CPC/RPCS at Waterford 3," February 10, 1983.
- Letter from L. V. Maurin (LP&L) to G. Knighton (NRC), "Waterford SES Unit 3 Test Report Supplement, CPC/CEAC PHASE II Software Verification, CPC Software Functional Inconsistency," January 27, 1983.

Mr. L. V. Maurin Vice Preside∋t - Nuclear Operations Louisiana Power & Light Company 142 Delaronde Street New Orleans, Louisiana 70174

cc: W. Malcolm Stevenson, Esq.
Monroe & Lemann
1423 Whitney Building
New Orleans, Louisiana 70130

Mr. E. Blake Shaw, Pittman, Potts and Trowbridge 1800 M Street, NW Washington, DC 20036

Mr. Gary L. Groesch 2257 Bayou Road New Orleans, Louisiana 70119

Mr. F. J. Drummond
Project Manager - Nuclear
Louisiara Power & Light Company
142 Delaronde Street
New Orleans, Louisiana 70174

Mr. D. B. Lester Production Engineer Louisiana Power & Light Company 142 Delaronde Street New Orleans, Louisiana 70174

Luke Fontana, Esq. 824 Esplanade Avenue New Orleans, Louisiana 70116

Stephen M. Irving, Esq. 535 North 6th Street Baton Rouge, Louisiana 70802

Resident Inspector/Waterford NPS P. O. Box 822 Killona, Louisiana 70066

Dr. D. C. Gibbs Middle South Service, Inc. P. O. Box 61000 New Orleans, Louisiana 70161 Regional Adminstrator-Region IV
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76012