



LOUISIANA / 142 DELARONDE STREET
POWER & LIGHT / P O BOX 6008 • NEW ORLEANS, LOUISIANA 70174 • (504) 366-2345

March 10, 1983

L. V. MAURIN
Vice President Nuclear Operations

W3P83-0547
3-A1.01.04
3-A37.02

Director of Nuclear Reactor Regulation
ATTENTION: Mr. G. Knighton, Chief
Licensing Branch No. 3
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

SUBJECT: Waterford SES Unit 3
Docket No. 50-382
NUREG 0737, Item I.G.1
Natural Circulation Testing

Reference: Letter dated November 14, 1980 from R. L. Tedesco To D. L. Aswell,
"Clarification of TMI-Related Requirements for New Operating
Licenses - Requirement for Training During Low Power Testing"

Dear Sir:

In Chapter 14 (Section 14.2.12.3.i5) of the Waterford 3 FSAR LP&L commits to a set of low power natural circulation tests in satisfaction of the operator training requirements of NUREG 0737, Item I.G.1.

Attached for your approval is a proposed FSAR revision to conduct the I.G.1 test following the trip from the 80% power level in conjunction with other natural circulation testing. No other aspect of the testing has been altered—specifically, the acceptance criteria dealing with operator training and natural circulation performance are preserved.

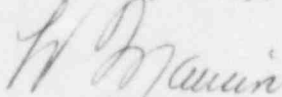
To conduct the required natural circulation tests at low power involves the operation of a critical reactor under conditions outside of the range allowed in Technical Specifications and outside the bounds of Waterford 3's Chapter 15 analyses. By performing the natural circulation tests following reactor trip from 80% power modifications to the Reactor Protective System are unnecessary and plant conditions will remain bounded by existing safety analyses and Technical Specifications with one exception. Current Technical Specifications (3.4.1.2) limit Mode 3 operation to one hour with Reactor Coolant Pumps tripped. In order to support other natural circulation testing at the 80% power level LP&L is pursuing a special test exception to allow for extended operation in Mode 3 without forced RCS flow.

All Waterford operators have participated in simulator training involving natural circulation conditions. As discussed with your Mr. W. Long of the Procedures and Test Review Branch, LP&L feels that previous operator training in conjunction with that offered in the subject testing will meet the requirements and intent of Item I.G.1 as clarified by the referenced letter.

We ask that early attention be given to this request. Upon receipt of your approval LP&L will amend the test procedures accordingly.

Should you have any questions in this matter please contact me or Mike Meisner at (504) 363-8938.

Yours very truly,



L. V. Maurin

LVM/MJM/ssd

Attachment

cc: W.M. Stevenson, E.L. Blake, J. Wilson, W. Long, D.E. Buschbaum

bcc: R. P. Barkhurst, F. J. Drummond, R. W. Prados, K. R. Iyengar, M. I. Meyer,
C. J. Decareaux, R. F. Burski, T. K. Armington, J. R. McGaha, G. R. Peeler,
Z. Sabri, L. Arnold, R. Starkey, S. Johnson. W. Cross, Central Records,
Nuclear Records (3), Licensing Library

14.2.12.3.15 NATURAL CIRCULATION

INSERT

14.2.12.3.15.1 Objectives

- A. To provide operator training in natural circulation under various plant conditions.
- B. To evaluate natural circulation flow conditions and heat removal capability.

15

14.2.12.3.15.1 Prerequisites

The reactor is operating at less than 5 percent of rated thermal power, with the Plant Protection System modified to allow continued reactor operation with all reactor coolant pumps secured. The high linear power trip setpoints are reduced.

18

14.2.12.3.15.3 Test Method

- A. Secure all reactor coolant pumps and verify natural circulation flow.
- B. Demonstrate proper Reactor Coolant System (RCS) temperature flow and pressure control, pressurizer level control, and steam generator level control with natural circulation under the following conditions:
- (1) Deenergized pressurizer heaters
 - (2) Reduced RCS pressure
 - (3) Isolated secondary side (feedwater and steam) of one steam generator

15

14.2.12.3.15.4 Acceptance Criteria

- A. Operator training requirements are met.
- B. Natural circulation cooling performs in accordance with design predictions of CEN-128, Response of Combustion Engineering Nuclear Steam Supply System to Transients and Accidents.

18

INSERT

so as to provide a satisfactory heat source after a trip. This test is performed in conjunction with the 80 percent loss of flow test (see 14.2.12.3.34).

NOTE: Additional natural circulation testing is described in 14.2.12.3.25, 14.2.12.3.35, and 14.2.12.3.41.

18