



**Florida  
Power**  
CORPORATION

May 23, 1985  
3F0585-15

Mr. H. R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Subject: Crystal River Unit 3  
Docket No. 50-302  
Operating License No. DPR-72  
Cycle 6 Reload Report, Dated 4/25/85  
Technical Specification Change Request No. 135

Dear Sir:

This letter provides supplemental information concerning the Crystal River 3 Reload Report as requested by your staff on April 17, 1985. Florida Power utilized the LYNXT, LYNXI and LYNX2 codes for the thermal hydraulic analysis for Cycle 6. These codes were not used for the transient analysis. The transient analysis was performed with the RADAR code which is the code used in Crystal River Unit 3 Reload Analyses. The attached table summarizes the thermal hydraulic design parameters for Cycle 5 and Cycle 6.

Sincerely,

G. R. Westafer  
Manager, Nuclear Operations  
Licensing and Fuel Management

PGH/feb

Attachment

cc: Dr. J. Nelson Grace  
Regional Administrator, Region II  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
101 Marietta Street N.W., Suite 2900  
Atlanta, GA 30323

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To: Reg Files*

CRYSTAL RIVER 3

THERMAL-HYDRAULIC DESIGN ANALYSIS

	<u>CYCLE 5</u>	<u>CYCLE 6</u>
RATED POWER, $MW_t$	2544	2544
DESIGN POWER, $MW_t$	2568	2568
REACTOR COOLANT FLOW, GPM	374880	374880
EFFECTIVE FLOW FOR HEAT TRANSFER, %	91.9	90.9
REFERENCE DESIGN $F_{\Delta H}$	1.71	1.71
REFERENCE DESIGN AXIAL POWER SHAPE	1.50 COSINE	1.65 COSINE
CHF CORRELATION	B&W-2	B&W-2
DESIGN DNBR LIMIT	1.30	1.30
PRINCIPAL T-H ANALYSIS CODES	CHATA, TEMP	LYNXT, LYNX1, LYNX2
MINIMUM DNBR @ 112% OVER POWER	2.05	2.07
MINIMUM DNBR @ CORE PROTECTION SAFETY LIMITS	>1.4	>1.6
LIMITING TRANSIENT DNBR	>1.7	>1.9
TRANSIENT ANALYSIS CODE	RADAR	RADAR