

# WOLF CREEK

NUCLEAR OPERATING CORPORATION

Bart D. Withers  
President and  
Chief Executive Officer

August 1, 1988

WM 88-0200


U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station PI-137  
Washington, D. C. 20555

Subject: Docket No. 50-482: Wolf Creek Generating Station  
Cycle 4 Radial Peaking Factor Limit Report

Gentlemen:

Enclosed is the Wolf Creek Generating Station Cycle 4 Radial Peaking Factor Limit Report. This report is being submitted pursuant to section 6.9.1.9 of the Wolf Creek Generating Station Unit No. 1 Technical Specifications.

Very truly yours,



Bart D. Withers  
President and  
Chief Executive Officer

BDW/jad

Ecnlsoure

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**Wolf Creek Unit 1 Cycle 4  
Radial Peaking Factor Limit Report**

This Radial Peaking Factor Limit Report is provided in accordance with Paragraph 6.9.1.9 of the Wolf Creek Nuclear Plant Technical Specifications.

The  $F_{XY}$  limits for Rated Thermal Power (3411 MWt) within specific core planes for Cycle 4 shall be:

1.  $F_{XY}^{RTP}$  less than or equal to 1.80 for all planes containing bank "D" control rods, and
2.  $F_{XY}^{RTP}$  less than or equal to 1.65 for all unrodded core planes.

These  $F_{XY}(z)$  limits were used to confirm that the heat flux hot channel factor  $F_Q(z)$  will be limited to the Technical Specification values of:

$$F_Q(z) \leq \left\{ \frac{2.32}{P} \right\} \{K(z)\} \text{ for } P > 0.5 \text{ and}$$
$$F_Q(z) \leq \{4.64\} \{K(z)\} \text{ for } P \leq 0.5$$

assuming the most limiting axial power distributions expected to result from the insertion and removal of control banks B, C, and D during operation, including the accompanying variations in the axial xenon and power distributions as described in the "Power Distribution Control and Load Following Procedures", WCAP-8403, September, 1974. Therefore, these  $F_{XY}$  limits provide assurance that the initial conditions assumed in the LOCA analysis are met, along with the ECCS acceptance criteria of 10 CFR 50.46.

See Figure 1 for a plot of  $\{F_Q^T P_{rel}\}$  versus Axial Core Height

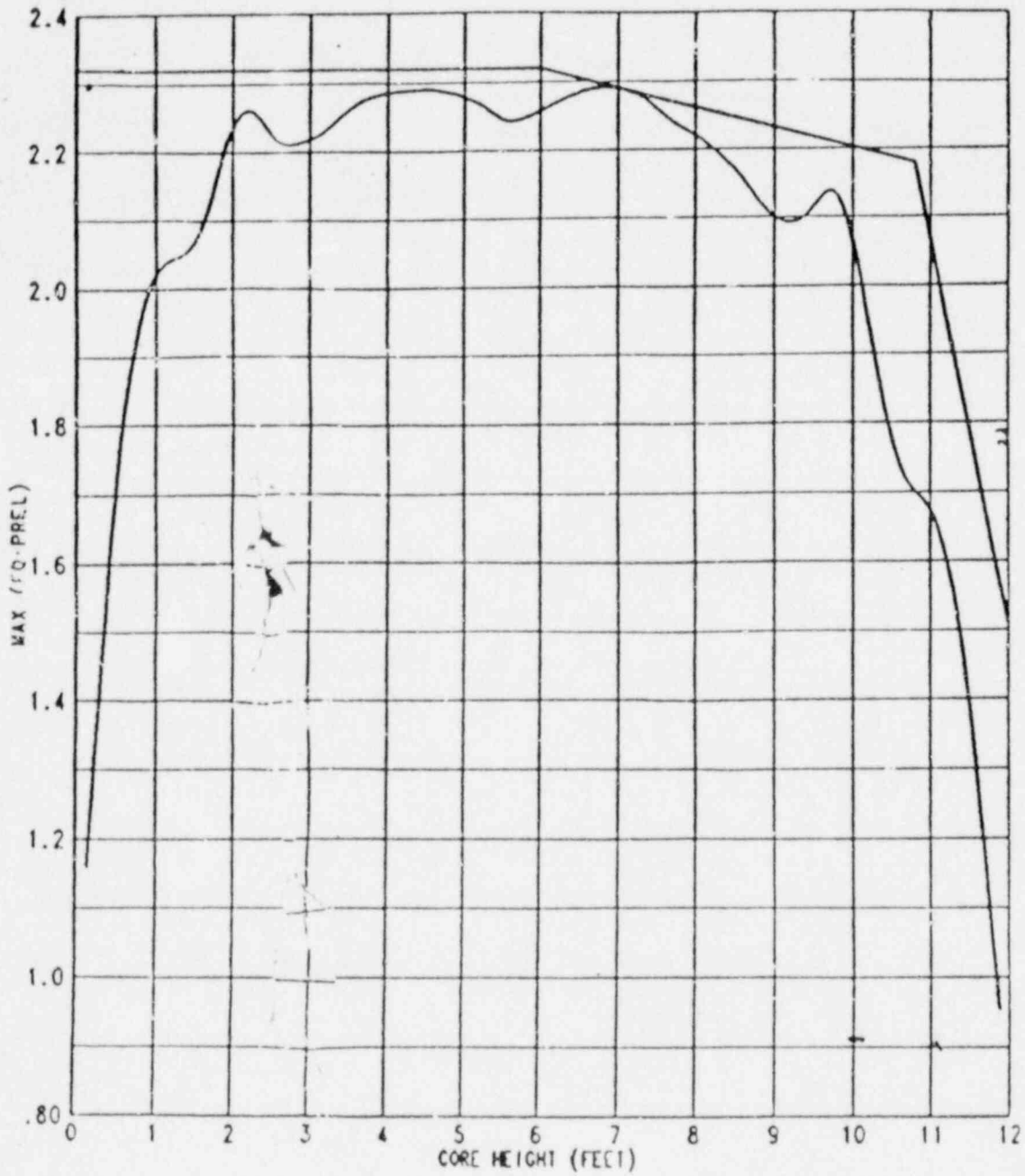


FIGURE 1

MAX (FO·PREL) VERSUS AXIAL CORE HEIGHT  
DURING NORMAL CORE OPERATION