

Doe H. K.

DEC 14 1971

Docket No. 50-302

Peter A. Morris, Director  
Division of Reactor Licensing

CRYSTAL RIVER UNIT III

The enclosed is submitted for inclusion in your question list  
for Crystal River Unit III.

Edson G. Case, Director  
Division of Reactor Standards

Enclosure:  
Request for Additional  
Information

cc w/encl:  
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bcc: M Danenfeld, DRS  
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POOR ORIGINAL

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DATE >	12/6/71	12/1/71	12/1/71		

REQUEST FOR ADDITIONAL INFORMATION

CRYSTAL RIVER UNIT III

DOCKET NO. 50-302

POOR ORIGINAL

The bases for Technical Specification 15.2.1 indicates that the limiting  $F_z^N$  for DNB is 1.50 with a symmetrical modified cosine axial power shape. Provide details on configurations analyzed to indicate why symmetrical power distributions with an axial peaking factor in excess of 1.50 cannot occur. Is there an experimental basis? What is the margin between worst expected axial peaking condition and the 1.5 limit? What is the axial peaking factor for the worst condition of the part length rods in the bottom of the core and the maneuvering bank inserted at the top of the core, or what restrictions will prevent such a configuration? How will the symmetrical axial peak be monitored in operation of the power plant, since the out-of-core instrumentation senses only tilts? What are the axial peaking factor limits for peaks in the top of the core? In view of the sensitivity of the core limits to axial location of the axial peak (the design  $F_z^N$  is stated to be 1.70, not 1.50), have you considered more comprehensive definitions of the design and limiting peaking factors?

OFFICE ▶						
SURNAME ▶						
DATE ▶						