OCT 22 1982

DISTRIBUTION:
Docket File
NRC PDR
L PDR
NSIC
ORB#3 Rdg
DEisenhut
JHeltemes
OELD
ELJordan
JMTaylor
ACRS-10
RAClark
PMKreutzer-3
KHeitner
Gray File

Docket No. 50-309

Mr. John H. Garrity, Senior Director
Nuclear Engineering and Licensing
Maine Yankee Atomic Power Company
83 Edison Drive
Augusta, Maine 04336

Dear Mr. Garrity:

SUBJECT: YAEC-1296P DNBR LIMIT METHODOLOGY FOR MAINE YANKEE

By letter dated April 8, 1982 you submitted report YAEC-1296P for NRC review and approval as a DNBR Limit Methodology for Maine Yankee. In reviewing this report, certain questions have arisen requiring your response. These questions are attached as Enclosure 1.

Since the YAEC-1 CHF correlation of this report was used in the Maine Yankee Cycle 7 reload, your response to these questions is needed by November 3, 1982. This will enable the review of YAEC-1296P to be completed without unwarranted delay.

Since this request for information affects fewer than ten respondents, OMB clearance under P. L. 96-511 is not required.

Sincerely,

Original signed by
Robert A. Clark

Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Enclosure: Request for
Additional Information

cc: See next page

OFFICE	ORB#3:DL	ORB#3:DL	ORB#3:DL				
SURNAME	PMKreutzer	KHeitner/pn	RAClark				
DATE	10/22/82	10/22/82	10/22/82				

Maine Yankee Atomic Power Company

cc: E. W. Thurlow, President
Maine Yankee Atomic Power Company
Edison Drive
Augusta, Maine 04336

Mr. Donald E. Vandenburgh
Vice President - Engineering
Yankee Atomic Electric Company
1671 Worcester Road
Framingham, Massachusetts 01701

John A. Ritsher, Esq.
Ropes & Gray
225 Franklin Street
Boston, Massachusetts 02110

State Planning Officer
Executive Department
189 State Street
Augusta, Maine 04330

Mr. E. C. Wood, Plant Manager
Maine Yankee Atomic Power Company
P. O. Box 3270
Wiscasset, Maine 04578

Regional Administrator
U. S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

First Selectman of Wiscasset
Municipal Building
U. S. Route 1
Wiscasset, Maine 04578

Mr. Paul Swetland
Resident Inspector
c/o U. S. Nuclear Regulatory
Commission
P. O. Box E
Wiscasset, Maine 04578

Mr. Charles B. Brinkman
Manager - Washington Nuclear Operations
Combustion Engineering, Inc.
4853 Cordell Avenue, Suite A-1
Bethesda, Maryland 20014

Mr. Robert H. Groce
Senior Engineer - Licensing
Maine Yankee Atomic Power Company
1671 Worcester Road
Framingham, Massachusetts 01701

U. S. Environmental Protection Agency
Region I Office
ATTN: Reg. Radiation Representative
JFK Federal Building
Boston, Massachusetts 02203

QUESTIONS ON YAEC-1

1. The nonuniform axial shape data is a composite of data from both a top-peaked and a bottom-peaked axial shape. An F-test of the equality of means and variances of the top-peaked and bottom-peaked data is highly significant, suggesting that the data should not be pooled. What is the justification for pooling the top-peaked and bottom-peaked data?

2. The significant difference between the performance of YAEC-1 on top-peaked and bottom-peaked axial shapes admits the possibility that for other axial shapes the performance may be even worse. The use of a tolerance limit implies that a sample was randomly selected from the population of interest. If "axial shape" represents a significant component of variation, and only two axial shapes were sampled, then the correspondence of sampled population and population of interest is highly unlikely. Is there any reason for regarding these two shapes as extremes? If not, what is the justification for the use of tolerance interval for setting the DNBR limit?

3. Provide measured and predicted DNB locations, both axially and radially, for each data point.