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NUCLEAR PRODUCTION

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February 3, 1983

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Ms. E. G. Adensam, Chief
Licensing Branch No. 4

Re: McGuire Nuclear Station
Docket No. 50-370

Dear Mr. Denton:

The following is Duke Power Company's response to several concerns which were identified by NRC Staff reviewers regarding the elimination of the boron injection tank (BIT) from Unit 2. This was discussed in telecons between Mr. P. B. Nardoci, et. al. (DPC) and Mr. R. Licciardo (NRC) on January 28, February 1, and February 2, 1983. The two major concerns for which responses were requested were:

- (a) Provide confirmation for McGuire Unit 2, that the volume of "unborated water" in the charging pump safety injection lines to be flushed into the Reactor Coolant System ahead of the 2000 ppm boron, is conservatively covered by the value used in the reanalysis of the main steam line break reported in Revision 43 of the FSAR.
- (b) Provide confirmation that considerations which concern public health and safety were not included in the "other plant considerations [which] led to a decision to reduce boron concentration rather than eliminate the boron injection tank completely" (on Unit 1) as described in Mr. W. O. Parker, Jr.'s (DPC) letter to Mr. H. R. Denton (NRC/NRR) dated March 2, 1982.

Westinghouse has confirmed that the changes in safety injection volumes (including the volume of "unborated water" in the charging pump safety injection lines to be flushed ahead of the 2,000 ppm boron), initial concentrations, and temperatures corresponding to the two analyzed system alternatives (those alternatives being reduction of boron concentration to 2,000 ppm, or bypassing the boron injection tank (which bounds boron injection tank elimination)) are introduced into the analyses in the LOFTRAN code used to calculate the system transient parameters. The plant considerations resulting in the decision to reduce boron concentration instead of eliminating the Unit 1 boron injection tank completely did not involve concerns for public health and safety, but rather were factors such as the difficulty of removing the large tank and its availability for possible future alternate uses.

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Drawings
Advanced
TO: R. Licciardo
Per R. Birke

Add: R. Licciardo
R. Birke
J. Rosenthal
M. Duncan

Harold R. Denton
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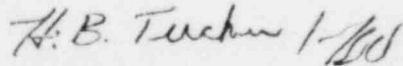
The following McGuire flow diagrams are attached:

MC-1554-1.2	MC-2554-1.2
MC-1554-2.0	MC-2554-2.0
MC-1554-3.0	MC-2554-3.0
MC-1554-3.1	MC-2554-3.1
MC-1562-1.0	MC-2562-1.0

These drawings show the differences between the Unit 1 and Unit 2 charging pump flow through the safety injection flow path.

If there are further questions regarding this matter, please advise.

very truly yours,



Hal B. Tucker

PBN/jfw
Attachment

cc: (w/o attachments)

Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Senior Resident Inspector
McGuire Nuclear Station

(w/attachments)
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