



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

TERA

July 31, 1980

Docket No. 50-245

Mr. W. G. Council, Senior Vice President
Nuclear Engineering and Operations
Northeast Nuclear Energy Company
P. O. Box 270
Hartford, Connecticut 06101

Dear Mr. Council:

By letter dated June 27, 1980, you have provided responses to seven questions that we posed relative to the Low Pressure Coolant Injection (LPCI) flow split methodology for Millstone Nuclear Power Station, Unit No. 1. To continue our review, the following additional information, keyed to the numbers in your letter, is requested:

4. On the response to our question numbered 4, please explain the formulation for LPCI shutoff head from the SAFE Code. Is this empirically based from system pressure characteristics?
5. The term W_i^2 should be W_E^2 in the formulation of equation (ii) as it was in equation 4 of your April 16, 1980 letter response to our initial questions. This changes the final formulation substantially. Also, in the equation for W_i , the sign of the denominator appears to be incorrect based on the algebraic manipulation of the previous equation, i.e. the denominator should be $[(K_e/288 \text{ gr } A_E^2) - B]$.

We note that the modeling of LPCI flow split seems to adversely affect Millstone's operational flexibility, i.e. decreased MAPLHGR limits. Please provide your reasoning for your request to review the LPCI flow split calculational model at this time. We are interested in greater calculational accuracy.

Sincerely,

Dennis M. Crutchfield
Dennis M. Crutchfield, Chief
Operating Reactors Branch
Division of Operating Reactors

cc: See next page

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cc:

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