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Dalwyn R. Davidson
VICE PRESIDENT
SYSTEM ENGINEERING AND CONSTRUCTION

September 9, 1982

Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Perry Nuclear Power Plant
Docket Nos. 50-440; 50-441
SER Outstanding Issues No. 3
Reactor Internals Vibration
Prototype Test Program

Dear Mr. Schwencer:

This letter and its attachments are provided in response to the Perry SER outstanding issue number 3 regarding reactor internals vibration prototype test program (SER ref. 3.9.2.3). Specific elements of Regulatory Guide 1.20 to be addressed in the program are: (1) analytical predictions of internals vibration levels; (2) instrumentation for vibration monitoring; (3) testing procedures and extent of visual inspection; and (4) resolution of past BWR problems, such as degradation of feedwater spargers, fuel channel box wear, and jet pump holddown beams.

The General Electric program for BWR/6 class plants, which addresses items (2) and (3), was described in a letter dated April 24, 1978, from Mr. Glenn Sherwood, GE to Mr. Edson Case, NRC (MFN/169/78) (Attachment 1). This program includes the vibration measurement and inspection program to be conducted during preoperational and initial startup testing for prototype and non-prototype plants in accordance with Regulatory Guide 1.20.

A draft copy of the report NEDE-22203, "Reactor Internals Vibration Predictions," is provided as Attachment 2. This report describes the GE reactor internals vibration program and provides peak amplitude predictions based on engineering analysis and prototype test results to address item (1). A finalized report will be submitted in October 1982. This report contains GE proprietary information and we request that it be handled as proprietary in accordance with 10CFR2.790.

The resolution of past BWR problems, item (4), such as degradation of feedwater spargers, fuel channel box wear, and jet pump holddown beams have been addressed in other CEI responses and are considered resolved in SER sections 3.9.3.1, 4.2.3.1 (5), and 3.9.5 respectively.

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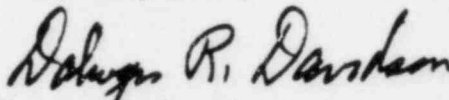
The feedwater spargers used at Perry are the improved interference fit triplesleeve design. Detailed information is provided in the GE Topical Report NEDE-21821, which satisfies the requirements in NUREG-0619, "BWR Feedwater Nozzle and Control Rod Drive Return Line Nozzle Cracking."

Fuel channel box wear is noted as a license condition for Perry. It was addressed as a Licensing Review Group (LRG-II) generic issue 3-CPB. A program for measuring channel box deflection through channel location monitoring and friction tests was presented in a letter dated May 17, 1982 from D. Holtzsch, LRG-II, to H. J. Faulkner, NRC.

Finally, CEI has committed to reduce the preload on jet pump holddown beams and perform periodic inservice inspections to resolve this issue.

We believe that this letter and its attachments should resolve the outstanding issue of reactor internals vibration program in the next Perry Supplementary Safety Evaluation Report (SSER No. 2).

Very truly yours,



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Vice President
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