APPENDIX A

Combustion Engineering, Inc.
Power Systems Group
Docket No. 99900401/84-03

NOTICE OF NONCONFORMANCE

Based on the results of an NRC inspection conducted on October 29-November 2, 1984, it appears that certain of your activities were not conducted in accordance with NRC requirements.

A. CE QADP 5.2, Section 4.5, concerning computer code testing and verification, states in part, "Computer code testing or verification is documented. The documentation consists of an analysis title page, a summary description of the test problem results, supporting data, and computer printouts, any hand calculations performed, a listing of coding, and the computer code certificate."

Contrary to the above, the FATES3A verification analysis (0000-TH-186) was found to have insufficient information to evaluate the intent or adequacy of the verification runs. In particular, more supporting information is required in the following areas for an adequate verification assessment:

1. A summary description of the test problems

2. A description of the basis for selecting the test problems

3. A more complete discussion of the results of the test problems related to the verification intent and needs.

B. CE Topical Report CENPD-210-A, Rev. 3, Section 17.3.1, "Design Analysis," states in part, that "Methods of analyses in the form of computer programs are controlled by the procedure. The computer programs that are used for safety-related analyses are certified for accuracy, method, and internal consistency prior to verification of the analysis in which it is used."

Contrary to the above, no verification calculations were available to certify the accuracy of the STRIKIN-II computer code. STRIKIN-II is described in CE Topical Report CENPD-135-P and is currently used in safety-related analyses.

C. CE Quality Assurance of Design Procedure (QADP) 5.2, Section 5.0, "Independent Review of Computer Codes," states in part, "The code testing documentation is reviewed as described in QADP 5.4 by an independent reviewer. In reviewing this documentation, the reviewer considers the items listed on checklist No. 3, Exhibit 5.2.5."

Contrary to the above, the verification calculations performed for the CELDA computer code, as described in CE Topical Report (CENPD-254-P-A) and for the HCROSS computer code were not independently reviewed. The CELDA computer code is currently used for safety-related calculations and the HCROSS Topical Report has been submitted to the NRC for NRR review and approval for use in safety-related analyses.

D. CE QADP 5.2, Section 4.1, "Computer Code Testing and Verification," states in part, "Codes are verified by a designated qualified engineer, scientist, or computer programmer to assure accuracy of method."

Contrary to the above, a modification implemented in a version of the CELDA Computer Code (designated as version 78226) was not tested and verified.