November 13, 1995

Mr. James M. Taylor
Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Mr. Taylor:

SUBJECT: NUREG-0700, REVISION 1, "HUMAN-SYSTEM INTERFACE DESIGN REVIEW GUIDELINE"

During the 426th meeting of the Advisory Committee on Reactor Safeguards, November 2-4, 1995, we heard presentations by and held discussions with the NRC staff concerning the subject Design Review Guideline. We also had the benefit of the document referenced.

An outgrowth of the Three Mile Island accident was an NRC requirement that all licensees and applicants for commercial nuclear power plant operating licenses conduct detailed control room design reviews, including reviews of remote shutdown panels, to identify and correct design deficiencies related to human factors. Extensive guidelines published as NUREG-0700, "Guidelines for Control Room Design Reviews," were prepared to support these reviews.

The introduction of computer-based, human-system interface (HSI) technology into nuclear power plants prompted the development of Revision 1 to NUREG-0700. The objective of this document is to provide guidance to the NRC staff for HSI reviews of design submittals or as part of an inspection or other type of regulatory review.

The staff has developed technically defensible principles in Part 1 and a set of guidelines for HSI design reviews in Part 2. However, we are concerned that the detailed HSI design review guidance in Part 2 may discourage the approval of other, equally acceptable alternatives. Furthermore, we are concerned that the guidelines in Part 2 will become de facto regulations.

We plan to continue our review of the overall human factors program.

Sincerely,

/s/

T. S. Kress
Chairman

Reference:
U. S. Nuclear Regulatory Commission, NUREG-0700, Revision 1, "Human-System Interface Design Review Guideline," dated January 1995
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