



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

September 15, 1981

Mr. William J. Dircks  
Executive Director for Operations  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

SUBJECT: EVALUATION OF THE IMPACT OF NUCLEAR POWER PLANT CHANGES REQUIRED  
BY NRC

Dear Mr. Dircks:

As a result of the TMI-2 accident, the NRC Staff has required the licensees at a number of operating commercial nuclear power plants to install new equipment and to modify existing equipment as well as to increase the number of inspections of safety-related systems.

Essentially all of these changes have involved the expenditure of funds, and it has been assumed that the changes have resulted in a reduction in the risk of accidents and potential exposures to the public and plant personnel that would result from such accidents. Many of the changes, however, have also caused an increase in occupational exposures. Unfortunately it has not always been clear how the NRC Staff makes a quantitative assessment in reaching a decision to require a specific change.

As best we can determine, the NRC Staff does not make use of a defined methodology in making such judgments. It appears that factors such as the resulting occupational dose increment (or decrement), the anticipated reduction in risk to health and economic resources, the financial costs involved, and the added plant and/or operational complexity need to be considered. The manner by which related costs are amortized (e.g., should the time period vary with the anticipated remaining life of the plant) is an additional issue to be considered.

We would be pleased to meet with the NRC Staff at an appropriate time for a briefing and related discussion of this subject.

Sincerely,

A handwritten signature in black ink, reading "J. Carson Mark", is written over the typed name.

J. Carson Mark  
Chairman

cc:  
S. Chilk, SECY