

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

March 11, 1980



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

Dear Mr. Dircks:

Several NTOL plant test programs are currently under consideration with regard to low power tests which are designed to provide operational training and to obtain information regarding plant performance during emergency conditions.

Some of the conditions which could usefully be included are verification of core cooling capability when natural circulation has been impeded or upset by one or more factors, including gas binding. This would make necessary the use of the "feed-bleed" or "reflux-condensation" processes. These processes have not been proven, and safety grade equipment is not in place to provide the "bleed" part of the process.

It would be prudent to investigate these processes under controlled conditions if we intend to depend on them during emergency conditions. To this end, the ACRS recommends that consideration should be given, if at all possible, to some verification testing of decay heat removal under upset conditions during low power testing programs.

Sincerely,

*Milton S. Plesset*

Milton S. Plesset  
Chairman