November 15, 1976

Mr. G. R. Quittschreiber
Advisory Committee on Reactor Safeguards
Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Quittschreiber:

SUBJECT: COMMENTS ON FLOATING NUCLEAR PLANT SUBCOMMITTEE MEETING - LOS ANGELES, CALIFORNIA, OCTOBER 27-28

I agree with the staff's conclusions that radioactivity releases to receiving waters from an FNP, resulting from normal operations or accidents within the design basis, are not expected to be substantially different from those of an LBP.

The major difference between the two types of plants, with respect to accidental releases via the liquid pathway, concerns a core melt-through event which deposits highly radioactive debris onto the sediments beneath the FNP. This debris will be subject to leaching immediately following the accident and for some time thereafter. The rate of leaching is highly dependent on the surface area and the chemical characteristics of the debris both of which cannot be predicted with high degree of confidence. Based on the limited data available, I would agree with the staff's estimate of the total leach rate from the debris of a core melt-through event with the realization that this value could be subject to order of magnitude variations depending on unknown factors involved in the melt-through scenario.

The two year time period allowed for leaching of the debris appears to be an excessive amount of time before removal or isolation of the debris is attempted. I firmly believe this time period could be drastically reduced and some effort should be made in the near future to evaluate alternative methods of removing or isolating core melt-through debris from an FNP.

Very truly yours,