

OAK RIDGE NATIONAL LABORATORY

OPERATED BY
UNION CARBIDE CORPORATION
NUCLEAR DIVISION

RECEIVED

8005140 403



POST OFFICE BOX X
OAK RIDGE, TENNESSEE 37830

100 MAR 31 PM 12 57

U.S. NUCLEAR REG. COMM.
ADVISORY COMMITTEE ON
REACTOR SAFEGUARDS

March 27, 1980

Mr. Paul Boehnert
Advisory Committee on Reactor Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

DISTRIBUTED TO ACRS MEMBERS

Dear Paul:

Because of the short time available to discuss our positions after the meeting of March 26 and the perhaps garbled way in which I presented my views, I am sending you this statement to help in unraveling things.

1. I believe that properly designed and implemented BUSS, SPS, MSS and ARI could perhaps reduce the likelihood of failure to scram by a factor of perhaps 3 to 10, but not 100 as suggested by GE. This is based in part upon the assumption that anticipated transients involve a relatively small number of scenarios and therefore specific contingencies could be addressed.
2. My comments about breakers did not reflect what I had in my notes. My specific concern is that simply using breakers made by different manufacturers does not really provide much diversity - only a very limited potential for improvement and could be counterproductive. Westinghouse now uses two breakers - and if MSS would provide those with redundant and independent inputs in key areas some improvement would be expected.
3. Calculations as to the amount of improvement to be achieved are hampered by our inability to focus upon where the PPS is deficient. We believe it is not in the simple random component failure area, but other systemic failure mechanisms are hard to pin down.
4. With regard to the choice between 3A and 4A, I believe that 3A plus the added relief capacity of 4A should be sufficient for PWR's, although implicit in that is the presumption that some sort of analysis would appear to justify capability of the modifications. I agree that in any case the improvements to the shutdown systems (BUSS, etc)

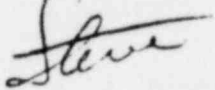
Mr. Paul Boehmert

2

March 27, 1980

should be included, whether 3A or 4A is opted. I can't decide about the need to increase the capacity of the SLCS for BWR's as suggested in 4A. ARI is, I believe, useful.

Sincerely,

A handwritten signature in cursive script that appears to read "Steve".

S. J. Ditto

SJD:alm

cc: W. Kerr
File - NoRC