Department of Energy
Washington, D.C. 20545
Docket No. 50-537
HQ:S:82:062

JUN 30 1982

Mr. Paul S. Check, Director
CRBR Program Office
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Check:

REVISED RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

Reference: Letter HQ:S:82:046, J. R. Longenecker to P. S. Check, "Responses to Request for Additional Information," dated June 14, 1982

Enclosed is a revised response to Question 421.09. Please delete the previous two-page response to this question submitted by the reference letter and replace it by the one-page enclosure.

Sincerely,

John R. Longenecker

John R. Longenecker
Acting Director, Office of the
Clinch River Breeder Reactor
Plant Project
Office of Nuclear Energy

Enclosure

cc: Service List
Standard Distribution
Licensing Distribution

D001

QUESTION CS 421.09

Identify where instrument sensors or transmitters supplying information to more than one protection channel, to both a protection channel and control channel, or to more than one control channel, are located in a common instrument line or connected to a common instrument tap. The intent of this item is to verify that a single failure in a common instrument line or tap (such as break or blockage) cannot defeat required protection system redundancy.

RESPONSE

Instrumentation sensors or transmitters located in instrument lines or connected to instrument taps do not supply more than one protection channel or control channel. Therefore, the required protection action will not be defeated by a blockage or breakage of an instrument line or instrument tap.

However, there are instrument sensors and transmitters located in instrument lines or connected to instrument taps which provide signals to both a protection channel and a control channel. In all cases, both the protection and control function has a three channel input redundancy. These redundant channels use separate instrument lines and taps. For example, the superheater steam flow Venturi provides three separate taps located 120^{o} apart for the redundant sensors. Thus, a single failure resulting from a blockage or a breakage in an instrument line or tap will not defeat the required protective action.