

#### UNIVERSITY OF VIRGINIA

# SCHOOL OF ENGINEERING AND APPLIED SCIENCE

DEPARTMENT OF NUCLEAR ENGINEERING AND ENGINEERING PHYSICS REACTOR FACILITY

TELEPHONE: 804-924-7136

September 18, 1979

Mr. Robert W. Reid, Chief Operating Reactors Branch #4 Division of Operating Reactors U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Dear Mr. Reid:

In January 1979 we submitted a proposed revision to the Technical Specifications included in our reactor license, R-66. The revised Technical Specifications are being reviewed by the NRC as a part of our license renewal and have not yet been approved.

We have identified several minor changes which we consider should be incorporated in the new Technical Specifications. Therefore, we request that the changes identified and discussed below be incorporated in and approved as a part of the revised UVAR Technical Specifications which we submitted in January 1979.

## SECTION 3.3

Change. The core gamma monitor should be included in the first sentence of the footnote. This would allow the core gamma monitor to be out of service for up to seven days without requiring that the reactor be shutdown.

Basis for Change: It is possible that the core gamma monitor could fail during reactor operation. It is considered that short term operation of the reactor without this instrument will not affect the safe operation of the reactor since it is intended to provide a redundant measure of reactor power. There are no reactor scrams off of this instrument.

There are four other radiation detecting instruments which are used to measure reactor power; namely two power range instruments, linear power, and Log N. All are required during reactor operation with no exception for short term outages. In addition, the bridge monitor is sensitive to core gamma power and will scram the reactor if high radiation levels are reached. It is also required for all reactor operation.

#### SECTION 4.1

Change. The first word in the second sentence of specification a should be changed from "safety" to "shim".

Basis for Change: All other references to the three scramable rods use the term "shim rod" (e.g. see definition 1.23).

#### SECTION 4.2

Change. Revise specification d to read as follows: "The power range channels 1 and 2 shall be checked against a primary system heat balance at least once each week that the reactor is in operation above 100 kilowatts in the forced convection mode".

Basis for Change. The present wording of the specification implies that the primary heat balance is required during every week when the reactor is operated above 100 kilowatts. However, the heat balance cannot be performed unless the reactor is operated in the forced convection mode. Thus, a strict interpertation of this requirement would not allow operation of the reactor at powers above 100 kilowatts if the forced convection cooling system was inoperable (e.g. due to a pump failure) for an extended period. Normally the reactor can be operated at up to 200 kilowatts in the natural convection mode.

We consider that the daily channel tests and channel checks of the power range monitors specified in section 4.2 are adequate to ensure that the power range monitors are operable and will scram the reactor prior to exceeding the limiting safety system setting.

### SECTION 6.2

Change. The second sentence of item d should be revised to read as follows: "Minutes of all meetings shall be disseminated to responsible personnel as designated by the Committee Chairman".

Basis for Change: The specific listing of people who will receive minutes of the Reactor Safety Committee should be included in the functioning statement of the Committee, not the technical specifications since it may require change. For example, the President of the University may request that we send his copy of the minutes to his designated representative instead of to him. We could not do so without violating our license conditions if this change is not made.

#### SECTION 6.3

Change. Item c should be changed to read as follows: "Substantive changes to the approved procedures shall be made only with the approval of the Reactor Safety Committee. Changes to the procedures which do not change their original intent may be made with the approval of the Facility Director. All such minor changes to procedures shall be documented and subsequently reviewed by the Reactor Safety Committee".

Basis for Change. This change allows the Facility Director instead of the Reactor Supervisor to approve minor changes to the procedure. Presently the Director approves all such changes. In addition, an editoral change of calling changes which can be approved by the Director "minor changes" instead of "temporary changes".

Letter to Robert W. Reid Page 3

These recommended changes have been reviewed and approved by the Reactor Safety Committee.

Sincerely,

B. V. Shriver, Director Reactor Facility

BLS:ph

cc: Dr. T. G. Williamson Mr. J. P. Farrar Reactor Safety Committee Mr. Steve Ramos, NRC