

TECHNICAL SPECIFICATIONS

10. The total reactivity of 2.5% in Specification 10 places a reasonable upper limit on the worth of all experiments which is compatible with the allowable excess reactivity and the shutdown margin and is consistent with the functional mission of the reactor.

3.2 REACTOR INSTRUMENTATION

Applicability

This specification applies to the instrumentation which must be available and operable for safe operation of the reactor.

Objective

The objective is to require that sufficient information be available to the operator to assure safe operation of the reactor.

Specification

The reactor shall not be operated unless the measuring channels listed in the following table are operable:

<u>Measuring Channel</u>	<u>Minimum Required</u>	<u>Operating Mode in Which Required</u>
Pool-Water-Level	1	--All-modes--
Startup Count Rate	1	All modes (during reactor startup)
Log N (Period)	1	All modes
Power Level (Linear N)	2	All modes
Reactor Coolant Inlet Temperature	1	Forced convection
Coolant Flow Rate	1	Forced convection
Reactor Pool Temperature	1	Natural convection

TECHNICAL SPECIFICATIONS

Bases

The neutron detectors assure that measurements of the reactor pool level are adequately displayed during reactor startup and low and high power operation. The temperature and flow detectors give information to the operator to prevent the exceeding of a Safety Limit.

3.3 REACTOR SAFETY SYSTEM

Applicability

This specification applies to the reactor safety system channels.

Objective

To require the minimum number of reactor safety system channels that must be operable in order to assure safe operation of the reactor.

Specification

The reactor shall not be operated unless the reactor safety system channels described in the following table are operable.

<u>Reactor Safety System Component/Channel</u>	<u>Minimum Required</u>	<u>Function</u>	<u>Operating Mode in Which Required</u>
Startup Count Rate	1	Prevent blade withdrawal when N count rate ≤ 2 cps	Reactor startup in all modes
Reactor Period	1	Automatic reactor scram with ≤ 3 sec period Control blade inhibit ≤ 15 sec period	All modes