

4.3 LIMITING CONDITIONS FOR OPERATIONS

4.3.1 Reactivity Requirements

Applicability. These specifications apply to the surveillance requirements for reactivity control of experiments and systems.

Objective. The objective is to measure and verify the worth, performance and operability of those systems affecting the reactivity of the reactor.

Specifications.

- a. The reactivity worth of each control rod and the shutdown margin shall be determined annually (interval not to exceed 15 months) and following significant core or control rod changes.
- b. The reactivity worth of an experiment shall be estimated or measured, as appropriate, before reactor operation with said experiment.
- c. The control rods shall be visually inspected for deterioration biennially (interval not to exceed two and one-half years).
- d. The transient rod drive cylinder and associated air supply system shall be inspected, cleaned and lubricated as necessary, semi-annually (interval not to exceed seven and one-half months).
- e. The reactor shall be pulsed semi-annually (interval not to exceed seven and one-half months) to compare fuel temperature measurements and peak power levels with those of previous pulses of the same reactivity value. If the reactor has not been pulsed since the last test pulse, the semi-annual test pulse surveillance may be postponed; however, a test pulse must be performed prior to any further pulsing.

Bases. The reactivity worth of the control rods is measured to assure that the required shutdown margin is available and to provide an accurate means for determining the reactivity worths of experiments inserted in the core. Past experience with TRIGA reactors gives assurance that measurement of the reactivity worth on an annual basis is adequate to insure no significant changes in the shutdown margin. The visual inspection of the control rods is made to evaluate corrosion and wear characteristics caused by operation in the reactor. The test pulse is performed prior to resumption of operational pulsing to provide assurance that pulsing characteristics of the reactor have not significantly changed.

4.3.2 Control and Safety System

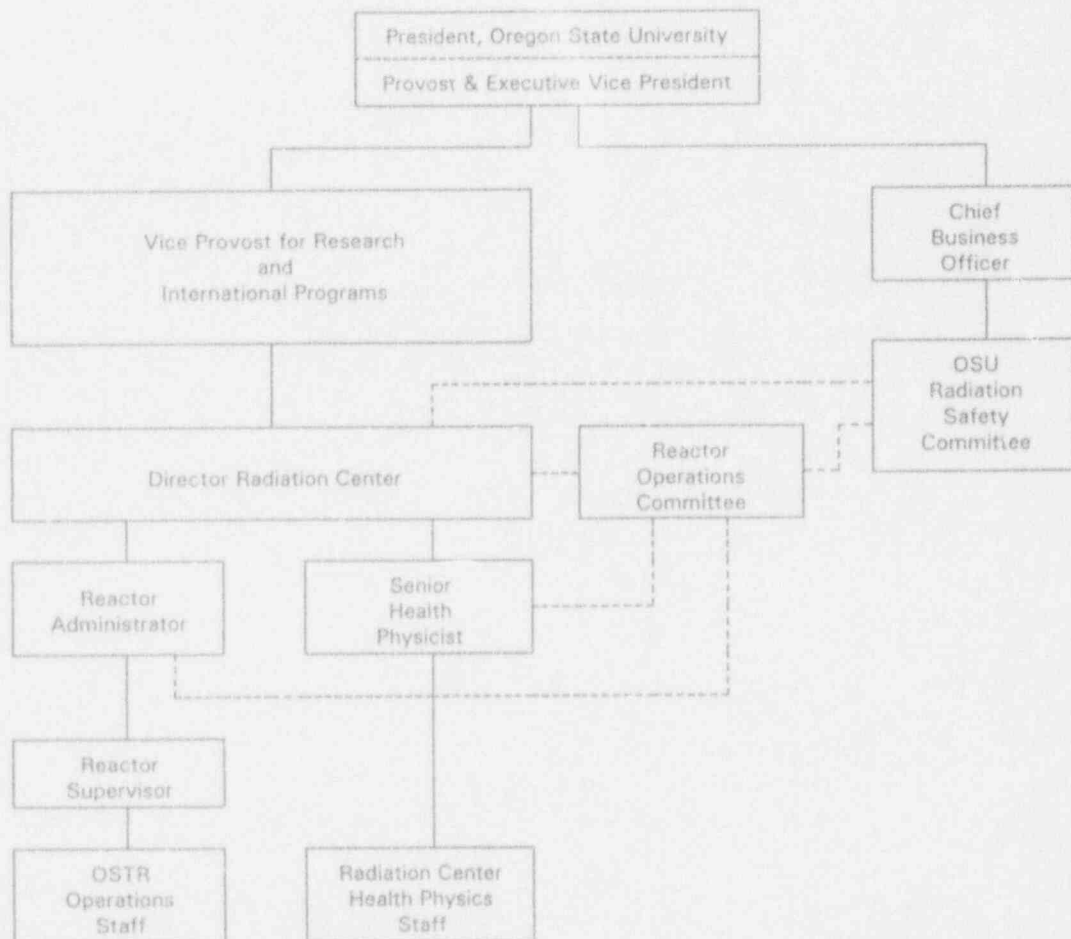
Applicability. These specifications apply to the surveillance requirements for measurements, tests, and calibrations of the control and safety systems.

Objective. The objective is to verify the performance and operability of those systems and components which are directly related to Reactor Safety.

6. ADMINISTRATIVE CONTROLS

6.1 ORGANIZATION

- a. The facility shall be under the direct control of the Radiation Center Director or a licensed senior operator designated by him to be in direct control. The Radiation Center Director shall be responsible to Oregon State University's Vice Provost for Research and International Programs for the safe operation and maintenance of the reactor and its associated equipment. The Radiation Center Director, or an individual appointed by the Director, shall be responsible for assuring that all operations are conducted in a safe manner and within the limits prescribed by the facility license and the requirements of the Reactor Operations Committee. The Radiation Center Director shall enforce rules for the protection of personnel against radiation.
- b. The safe operation of the OSTR shall be related to the University Administration as shown in the following chart:



————— Normal administrative reporting channel
 - - - - - Technical review (as applicable), communications and assistance