

### 3.6 REACTOR BUILDING

#### Applicability

Applies to the containment integrity of the reactor building.

#### Objective

To assure containment integrity

#### Specifications

- 3.6.1 Containment integrity, as defined in Section 1.7, shall be maintained whenever all three of the following conditions exist:
- a. Reactor coolant pressure is 300 psig or greater.
  - b. Reactor coolant temperature is 200°F or greater.
  - c. Nuclear Fuel is in the core.
- 3.6.2 Containment integrity shall be maintained when both the reactor coolant system is open to the containment atmosphere and a shutdown margin exists that is less than that for a refueling shutdown.
- 3.6.3 Positive reactivity insertions which would result in a reduction in shutdown margin to less than 1%  $\Delta k/k$  shall not be made by control rod motion or boron dilution unless containment integrity is being maintained.
- 3.6.4 The reactor shall not be critical when the reactor building internal pressure exceeds 2.0 psig or 1.0 psi vacuum.
- 3.6.5 Prior to criticality following refueling shutdown, a check shall be made to confirm that all manual containment isolation valves which should be closed are closed and are conspicuously marked.
- 3.6.6 If, while the reactor is critical, a reactor building isolation valve is determined to be inoperable in a position other than the required position, the other reactor building isolation valve in the line shall be tested to insure operability. If the inoperable valve is not restored within 48 hours, the operable valve will be closed or the reactor shall be brought to the cold shutdown condition within an additional 24 hours.
- 3.6.7 The hydrogen recombiner shall be operable during REACTOR CRITICAL, HOT STANDBY and POWER OPERATION. With the hydrogen recombiner inoperable, restore the recombiner to operable status or bring the reactor to HOT SHUTDOWN within seven (7) days.

TABLE 4.1-1  
INSTRUMENT SURVEILLANCE REQUIREMENTS

| <u>CHANNEL DESCRIPTION</u>                  | <u>CHECK</u> | <u>TEST</u> | <u>CALIBRATE</u> | <u>REMARKS</u>   |
|---|--------------|-------------|------------------|--|
| 1. Protection Channel<br>Coincidence Logic  | NA           | M           | NA               |  |
| 2. Control Rod Drive<br>Trip Breaker        | NA           | M           | NA               | Includes shunt trip feature.   |
| 3. Power Range Amplifier                    | D(1)         | NA          | (2)              | (1) When reactor power is greater than 15%.<br>(2) When above 15% reactor power run a heat balance check once per shift. Heat Balance calibration shall be performed whenever heat balance exceeds indicated neutron power by more than two percent. |
| 4. Power Range Channel                      | S            | M           | M(1)(2)          | (1) When reactor power is greater than 60% verify imbalance using incore instrumentation.<br>(2) When above 15% reactor power calculate axial offset upper and lower chambers after each startup if not done within the previous seven days.         |
| 5. Intermediate Range Channel               | S(1)         | P           | NA               | (1) When in service.   |
| 6. Source Range Channel                     | S(1)         | P           | NA               | (1) When in service.   |
| 7. Reactor Coolant Temperature<br>Channel   | S            | M           | R                |  |
| 8. High Reactor Coolant<br>Pressure Channel | S            | M           | R                |  |
| 9. Low Reactor Coolant<br>Pressure Channel. | S            | M           | R                |  |

- c. documentation that the changes have been reviewed and approved pursuant to 6.8.2.
- 2. Shall become effective upon review and approval by GPUNC Management.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 The ODCM shall be approved by the Commission prior to implementation.

6.14.2 GPU Nuclear Corporation initiated changes to the ODCM:

- 1. Shall be submitted to the NRC in the Semiannual Radioactive Effluent Release Report for the period in which the changes were made. This submittal shall contain:
  - a. sufficiently detailed information to justify the changes without benefit of additional or supplemental information;
  - b. a determination that the changes did not reduce the accuracy or reliability of dose calculations or setpoint determinations; and,
  - c. documentation that the changes have been reviewed and approved pursuant to 6.8.2.
- 2. Shall become effective upon review and approval by GPUNC Management.

6.15 Deleted

6.16 Post-Accident Sampling Programs NUREG 0737 (II.B.3).

Programs which will ensure the capability to accurately sample vital areas under accident conditions have been implemented.

The following programs have been established:

- 1. Iodine Sampling
- 2. Reactor Coolant Sampling
- 3. Containment Atmosphere Sampling

Each program shall be maintained and shall include the following:

- 1. Training of personnel,
- 2. Procedures and,
- 3. Provisions for maintenance of sampling and analysis equipment.