

3.5.3 Safety Features Actuation System Setpoints

Applicability

This specification applies to the safety features actuation system actuation setpoints.

Objective

To provide for automatic initiation of the safety features actuation system in the event of a breach of reactor coolant system integrity.

Specification

The safety features actuation setpoints and permissible bypasses shall be as follows:

| <u>Functional Unit</u> | <u>Action</u> | <u>Setpoint</u> |
|---------------------------------------|--|----------------------|
| High Reactor Building Pressure* | Reactor Building Spray | ≤30 psig (44.7 psia) |
| | High Pressure Injection | ≤4 psig (18.7 psia) |
| | Start of Reactor Building Cooling and Reactor Building Isolation | ≤4 psig (18.7 psia) |
| | Reactor Bldg. Ventilation | ≤4 psig (18.7 psia) |
| | Low Pressure Injection | ≤4 psig (18.7 psia) |
| | Penetration Room Ventilation | ≤4 psig (18.7 psia) |
| Low Reactor Coolant System Pressure** | High Pressure Injection | ≥1526 psig |
| | Low Pressure Injection | ≥1526 psig |
| | Start of Reactor Building Cooling and Reactor Building Isolation | ≥1526 psig |

*May be bypassed during reactor building leak rate test.

**May be bypassed below 1750 psig and is automatically reinstated above 1750 psig.

With the safety features actuation setpoints less conservative than the above values, declare the channel inoperable and apply the applicable Action requirements of Table 3.5.1-1 until the channel is restored to OPERABLE status with the trip setpoint adjusted consistent with the trip setpoint value.

Bases

High Reactor Building Pressure

The basis for the 30 psig and 4 psig setpoints for the high pressure signal is to establish a setting which would be reached in adequate time in the event of a DBA, cover a spectrum of break sizes and yet be far enough above normal operation maximum internal pressure to prevent spurious initiation.

Low Reactor Coolant System Pressure

The basis for the 1526 psig low reactor coolant pressure setpoint for high and low pressure injection initiation is to establish a value which is high enough such that protection is provided for the entire spectrum of break sizes and is far enough below normal operating pressure to prevent spurious initiation. (1)

REFERENCE

- (1) FSAR, Section 14.2.2.5
- (2) B&W Calculation 32-1158581