

INSTRUMENTATION

BASES

REACTOR TRIP SYSTEM and ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION (Continued)

The Engineered Safety Features Actuation System interlocks perform the following functions:

P-4 Reactor tripped - Actuates Turbine trip, closes main feedwater valves on T_{avg} below Setpoint, prevents the opening of the main feedwater valves which were closed by a Safety Injection or High Steam Generator Water Level signal, allows safety injection block so that components can be reset or tripped.

Reactor not tripped - prevents manual block of Safety Injection.

P-11 Defeats the manual block of Safety Injection actuation on low pressurizer pressure and low steam line pressure and defeats steam line isolation on negative steam line pressure rate. Defeats the manual block of the motor-driven auxiliary feedwater pumps on trip of main feedwater pumps and low-low steam generator water level.

P-12 On decreasing reactor coolant loop temperature, P-12 automatically blocks steam dump and allows manual bypass of steam dump block for the cooldown valves only. On increasing reactor coolant loop temperature, P-12 automatically defeats the manual bypass of the steam dump block.

P-14 On increasing steam generator level, P-14 automatically trips all feedwater isolation valves, pumps and turbine and inhibits feedwater control valve modulation.

Surveillances for the Reactor Trip Bypass Breakers are included in response to the NRC's Generic Letter 85-09, dated May 23, 1985.

3/4.3.3 MONITORING INSTRUMENTATION

3/4.3.3.1 RADIATION MONITORING FOR PLANT OPERATIONS

The OPERABILITY of the radiation monitoring instrumentation for plant operations ensures that: (1) the associated action will be initiated when the radiation level monitored by each channel or combination thereof reaches its Setpoint, (2) the specified coincidence logic is maintained, and (3) sufficient redundancy is maintained to permit a channel to be out-of-service for testing or maintenance. The radiation monitors for plant operations sense radiation levels in selected plant systems and locations and determine whether or not predetermined limits are being exceeded. The radiation monitors send actuation signals to initiate alarms or automatic isolation action and actuation of Emergency Exhaust or Ventilation Systems. Some of the final actuations are dependent on plant condition in addition to the actuation signals from the radiation monitors.

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