

TABLE 3.3-1 (Continued)

REACTOR TRIP SYSTEM INTERLOCKS

<u>DESIGNATION</u>	<u>CONDITION</u>	<u>SETPOINT</u>	<u>ALLOWABLE VALUES</u>	<u>FUNCTION</u>
P-6	1 of 2 Intermediate range above setpoint (increasing power level)	1×10^{-10}	$< 3 \times 10^{-10}$	Allows manual block of source range reactor trip
	2 of 2 Intermediate range below setpoint (decreasing power level)	5×10^{-11}	$> 3 \times 10^{-11}$	Defeats the block of source range reactor trip
P-10	2 of 4 Power range above setpoint (increasing power level)	10%	<11%	Allows manual block of power range (low setpoint) and intermediate range reactor trips and intermediate range rod stop. Blocks source range reactor trip.
	3 of 4 Power range below setpoint (decreasing power level)	8%	>7%	Defeats the block of power range (low setpoint) and intermediate range reactor trips and intermediate range rod stop.
				Input to P-7
P-7	2 of 4 Power range above setpoint or	10%	<11%	Allows reactor trip on: Low flow or reactor coolant pump breakers open in more than one loop, Under-voltage (RCP busses), Under-frequency (RCP busses), Turbine Trip, Pressurizer low pressure, and Pressurizer high level.
	1 of 2 Turbine Impulse chamber pressure above setpoint (Power level increasing)	Pressure equivalent to 10% Rated Turbine Power	<11%	

NORTH ANNA - UNIT 1

3/4 3-8

ATTACHMENT 2

TABLE 3.3-1 (Continued)

REACTOR TRIP SYSTEM INTERLOCKS

<u>DESIGNATION</u>	<u>CONDITION</u>	<u>SETPOINT</u>	<u>ALLOWABLE VALUES</u>	<u>FUNCTION</u>
P-6	1 of 2 Intermediate range above setpoint (increasing power level)	1×10^{-10}	$< 3 \times 10^{-10}$	Allows manual block of source range reactor trip
	2 of 2 Intermediate range below setpoint (decreasing power level)	5×10^{-11}	$> 3 \times 10^{-11}$	Defeats the block of source range reactor trip
P-10	2 of 4 Power range above setpoint (increasing power level)	10%	<11%	Allows manual block of power range (low setpoint) and intermediate range reactor trips and intermediate range rod stop. Blocks source range reactor trip.
	3 of 4 Power range below setpoint (decreasing power level)	8%	>7%	Defeats the block of power range (low setpoint) and intermediate range reactor trips and intermediate range rod stop.
P-7	2 of 4 Power range above setpoint	10%	<11%	Input to P-7 Allows reactor trip on: Low flow or reactor coolant pump breakers open in more than one loop, Under-voltage (RCP busses), Under-frequency (RCP busses), Turbine Trip, Pressurizer low pressure, and Pressurizer high level.
	or 1 of 2 Turbine Impulse chamber pressure above setpoint (Power level increasing)	Pressure equivalent to 10% Rated Turbine Power	<11%	

ATTACHMENT 3

UPDATED DISCUSSION OF PROPOSED TECHNICAL SPECIFICATION CHANGES

The purpose of the P-7 interlock is to allow an orderly reactor startup when plant primary conditions are off normal and the unit is coming out of a shutdown condition. For example, not all reactor coolant pumps may be running, pressurizer level and pressure will be outside normal operating ranges, and the turbine may not be latched and loaded. To prevent uncalled for reactor trips during these startup conditions, certain reactor trips (RCS low flow or RCP breakers open, pressurizer low pressure, pressurizer high level, RCP Bus undervoltage or underfrequency and turbine unlatched) are permitted to be blocked by P-7 provided power level is limited to 10%.

The determination of actual plant power level for the P-7 interlock is based on the P-10 interlock which serves as a direct measure of 10% rated thermal power (i.e. reactor power) and the P-13 interlock which, by design, is to be a measure of 10% rated turbine power. P-10 is sensed via the excore nuclear instrumentation system power range detectors, and P-13 is sensed via first stage impulse pressure in the high pressure turbine.

The existing Technical Specification for the P-13 input to the P-7 setpoint incorrectly relates to 10% rated reactor power.

The Turbine impulse pressure is not a constant value at 10% Rated Thermal Power since the turbine is not the only steam load. Use of auxiliary steam and/or steam dumps cause the turbine impulse pressure to vary for a given Rated Thermal Power. Therefore, Rated Thermal Power cannot be used as a measure of turbine power which is what P-13 is to reflect. The proposed change will allow the system to be operated as designed. This change is consistent with the Setpoint Study/PLS for North Anna.

Therefore, the probability of occurrence or the consequences of a malfunction of equipment important to safety and previously evaluated in the FSAR is not increased, the possibility of a different type of accident or malfunction than was previously evaluated in the FSAR has not been created and the margin of safety as described in the BASES section of any part of the Technical Specification is not reduced. This change is administrative in nature and fits example 1 of an amendment that is not likely to involve a significant hazards consideration as referenced in the April 6, 1983 Federal Register.