

Description of Event

On September 10, 1982, while reviewing a Unit 1 Instrument Calibration Procedure, an Instrumentation Technician discovered an incorrectly specified reset point for a comparator card in the Reactor Trip signal blocking and unblocking circuitry. Unit 1 was defueled and in a refueling outage when the error was discovered. This event is reportable pursuant to T.S. 6.9.1.9.b.

Probable Consequences of Occurrence

Turbine impulse (first stage) pressure channels P-446 and P-447 supply input to the Reactor Trip block circuitry as follows:

| <u>CONDITION</u> | <u>SETPOINT</u> | <u>T.S. ALLOWABLE VALUES</u> | <u>FUNCTION</u> |
|---|---|--------------------------------------|---|
| <u>I Power level decreasing</u> | | | |
| 3 of 4 Power range below setpoint and 2 of 2 Turbine Impulse chamber pressure below setpoint | 8% | >7% | Prevents reactor trip on: Low flow or reactor coolant pump breakers open in more than one loop, Undervoltage (RCP busses), Underfrequency (RCP busses), Turbine Trip, Pressurizer low pressure, and Pressurizer high level. |
| <u>II Power level increasing</u> | | | |
| 2 of 4 Power range above setpoint or 1 of 2 Turbine Impulse chamber pressure above setpoint | 10% | <11% | Allows reactor trip on: Low flow or reactor coolant pump breakers open in more than one loop, Undervoltage (RCP busses), Underfrequency (RCP busses), Turbine Trip Pressurizer low pressure, and Pressurizer high level. |
| | Pressure equivalent to 10% RATED THERMAL POWER | <11% | |

The typographical error resulted in a channel P-446 comparator card reset setting of a pressure equivalent to 22 percent of Rated Thermal Power. The correct setpoint is a pressure equivalent to 10 percent of Rated Thermal Power and T.S. Table 3.3-1 specifies a setpoint of less than 11 percent.

The incorrect setpoint existed from March 23, 1981, when the channel was calibrated, to September 27, 1982, when the channel was recalibrated to the correct setpoint. During this period,

Unit 1 operated at power levels greater than 10 percent of Rated Thermal Power approximately 12 months. During this period of time, redundant channel P-447 was correctly calibrated and operable. The power range channels were either operable and in calibration or in the tripped condition (power range channel N-44 was in the tripped condition for approximately four months of power operation during the period when channel P-446 was out of calibration). Since the unit is not operated in the 10 to 22 percent power range, which is the range in which the incorrect setpoint would have resulted in incorrect comparator card output, except during unit startups and shutdowns, incorrect comparator card output existed for only very short periods of time. During these short periods of time, the function of incorrectly set comparator card was performed by redundant channel P-447 and the power range channels; therefore, the public health and safety were not affected.

Cause of Event

Investigation revealed that the setpoint error was the result of a typographical error made on February 11, 1981 when changes to the setpoints were being made in accordance to an Engineering Study.

Immediate Corrective Action

The comparator card setpoint was corrected. The setpoint specified in the Instrument Calibration Procedure was changed to the correct value.

Scheduled Corrective Action

This event was an isolated event. Setpoint errors caused by typographical errors are extremely rare. No scheduled corrective actions are required.

Action Taken To Prevent Recurrence

No further action is required.

Generic Implications

This event does not have generic implications.