

Attachment 3

Technical Specifications Changes

TABLE 4.3-1 (Continued)

## REACTOR TRIP SYSTEM INSTRUMENTATION SUREVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
13. Loss of Flow - Two Loops	S	R	N.A.	1
14. Steam Generator Water Level - Low-Low	S	R	M	1, 2
15. Steam/Feedwater Flow Mismatch and Low Steam Generator Water Level	S	R	M	1, 2
16. Undervoltage - Reactor Coolant Pump Busses	N.A.	R	M	1
17. Underfrequency - Reactor Coolant Pump Busses	N.A.	R	M	1
18. Turbine Trip				
A. Low Auto Stop Oil Pressure	N.A.	N.A.	S/U(1)	N.A.
B. Turbine Stop Valve Closure	N.A.	N.A.	S/U(1)	N.A.
19. Safety Injection Input from ESF	N.A.	N.A.	M(4)** & (5)	1, 2
20. Reactor Coolant Pump Breaker Position Trip	N.A.	N.A.	R	1
21. A. Reactor Trip Breaker	N.A.	N.A.	M(5), (9), & (11)	1, 2, & *
B. Reactor Trip Bypass Breaker	N.A.	N.A.	M(5), (9), & R(10)	1, 2, & *
22. Automatic Trip Logic	N.A.	N.A.	M(5)	1, 2, & *

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Amendment No.

TABLE 4.3-1 (Continued)

NOTATION

- \* - With the reactor trip system breakers closed and the control rod drive system capable of rod withdrawal.
- \* \* - Surveillance requirements for the manual ESF functional test of the safety injection input to the reactor trip breakers is suspended for the duration of Cycle 9 operation.
- (1) - If not performed in previous 7 days.
- (2) - Heat balance only, above 15% of RATED THERMAL POWER. Adjust channel if absolute difference > 2 percent.
- (3) - Compare incore to excore axial offset above 15% of RATED THERMAL POWER. Recalibrate if absolute difference  $\geq$  3 percent.
- (4) - Manual ESF functional input check every 18 months.
- (5) - Each train or logic channel shall be tested at least every 62 days on a STAGGERED TEST BASIS.
- (6) - Neutron detectors may be excluded from CHANNEL CALIBRATION.
- (7) - Below the P-6, (Block of Source Range Reactor Trip) Setpoint.
- (8) - The CHANNEL FUNCTIONAL TEST shall independently verify the OPERABILITY of the undervoltage and shunt trip circuits for the Manual Reactor Trip Function. The test shall also verify OPERABILITY of the Bypass Breaker trip circuit(s).
- (9) - Local manual shunt trip prior to placing the bypass breaker into service.
- (10) - Automatic undervoltage trip.
- (11) - The CHANNEL FUNCTIONAL TEST shall independently verify the OPERABILITY of the undervoltage and shunt trip attachments of the Reactor Trip Breakers.

Attachment 4

Significant Hazards Consideration

## SIGNIFICANT HAZARDS CONSIDERATION EVALUATION

Technical Specification 4.3.1.1.1, Table 4.3-1, Item 19, requires that the manual Engineered Safety Feature (ESF) functional input to the Reactor Trip System instrumentation be verified operable every 18 months. On March 25, 1993, at 1526 hours, it was determined that the testing had not been properly performed for Unit 2. (North Anna Unit 1 is currently in a refueling outage and the required surveillance testing will be completed prior to unit startup.) The requirements of Technical Specification 4.0.3 were immediately invoked which permits conducting the required surveillance test within the next 24 hours following discovery of the missed surveillance.

The need for the Technical Specification changes was identified during our programmatic review of Technical Specification surveillance requirements as described in our letters to you dated May 14, 1992 (Serial No. 92-281) and September 8, 1992 (Serial No. 92-482). This programmatic review was also described in detail during a February 25, 1993 meeting in the NRC Region II office regarding North Anna self-assessment follow-up activities. While reviewing the periodic test which accomplishes the surveillance requirement, it was determined that the output from one manual safety injection switch to one bypass breaker had not been functionally tested and the output from the redundant manual safety injection switch to both reactor trip breakers and the other bypass breaker had not been tested. The Technical Specification changes suspend the manual ESF functional test of the safety injection input to the reactor trip breakers for the remainder of operating Cycle 9.

Suspending the requirement to perform the manual ESF functional test of the safety injection input to the reactor trip breakers for the remainder of the current operating cycle does not pose a significant safety impact. Testing performed via the existing surveillances verifies that between the two manual safety injection switches, all reactor trip and bypass breakers are verified tripped. If manual safety injection is required, Emergency Operating Procedures (EOPs) require that the operators manually initiate both trains of safety injection. The operators are trained to initiate both trains of safety injection by actuating both manual safety injection switches. The safety injection input to the reactor trip breakers circuitry is designed as a backup to the automatic reactor trip and safety injection signals and to the manual reactor trip circuitry. Each of these primary methods for tripping the reactor have been completely and satisfactorily tested in accordance with the Technical Specification surveillance requirements. No credit is taken for manual safety injection or the subsequent reactor trip in the plant's accident analysis bases.

The Technical Specification changes for excluding the manual Engineered Safety Feature (ESF) functional test of the safety injection input to the reactor trip breakers, as required by Technical Specification 4.3.1.1.1, Table 4.3-1, Item 19, has been evaluated against the criteria in 10CFR50.92. Based on that evaluation, we have determined that no significant hazards consideration exists. A summary of our evaluation is provided below.

1. The Technical Specification changes do not involve a significant increase in the probability or consequences of an accident previously evaluated. No credit is taken

for the manual safety injection input to the reactor trip breakers in the plant's accident analysis bases or Emergency Operating Procedures (EOPs). The accident analysis and EOPs require that the operators verify that a reactor/turbine trip have occurred before initiating a manual safety injection in the event of an emergency. Not testing the manual safety injection input to the reactor trip breakers until the unit shuts down and enters a refueling outage does not significantly affect the performance of the Reactor Trip System. The surveillance test must be performed when the unit is shutdown. Performing the surveillance test during power operation is not practical.

2. The Technical Specification changes do not create the possibility of a new or different kind of accident from any accident previously evaluated. Since the Technical Specification changes require no hardware modifications (i.e., alterations to the plant configuration), operation of the facility without those surveillance requirements does not create the possibility for any new or different kind of accident which has not already been evaluated in the Updated Final Safety Analysis Report (UFSAR).

The Technical Specification changes regarding the requirement for performing the manual ESF functional test of the safety injection input to the reactor trip breakers will not result in any physical alteration to any plant system and there will not be a change in the method by which any safety related system performs its function. The design and operation of the Reactor Trip System remains unchanged. No credit is taken for the manual safety injection input to the reactor trip breakers in the plant's accident analysis bases or Emergency Operating Procedures (EOPs).

3. The Technical Specification changes do not involve a significant reduction in the margin of safety. The output from one manual safety injection switch to both reactor trip breakers and one bypass breaker, and the output from the redundant manual safety injection switch to one bypass breaker have been functionally tested satisfactorily. In addition, the primary methods for tripping the reactor, which are the automatic reactor trip, the manual reactor trip, and the automatic safety injection circuitry, are fully operable and have been functionally tested satisfactorily in accordance with the Technical Specification surveillance requirements. If manual safety injection is required, EOPs require that the operators manually initiate both trains of safety injection. The operators are trained to initiate both trains of safety injection by actuating both manual safety injection switches. Therefore, the current testing assures a backup reactor trip signal is generated when the operators manually initiate both trains of safety injection in accordance with the EOPs. In addition, no credit is taken for the manual ESF functional test of the safety injection input to the reactor trip breakers in the plant's accident analysis bases. The EOPs require that the operator verify that a reactor/turbine trip have occurred before initiating a manual safety injection in the event of an emergency. In the remote event of a failure of the reactor trip circuitry, the EOPs do not utilize the safety injection-reactor trip signal. The operators are directed to shutdown the reactor by manually inserting the control rods.