ATTACHMENT A

Revise Appendix A as follows:

Remove Pages	Insert Pages
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REACTOR COOLANT SYSTEM

HOT STANDBY

LIMITING CONDITION FOR OPERATION

3.4.1.2 a. At least two of the reactor coolant loops listed below shall be in operation.*

1. Reactor Coolant Loop (A) and its associated steam generator and reactor coolant pump,

2. Reactor Coolant Loop (B) and its associated steam generator and reactor coolant pump,

3. Reactor Coolant Loop (C) and its associated steam generator and reactor coolant pump.

APPLICABILITY: MODE 3 with the Reactor Trip Breakers Closed

ACTION:

a. With less than the above required reactor coolant loops in operation, open the reactor trip system breakers, and

b. Suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required coolant loop to operation.

SURVEILLANCE REQUIREMENTS

4.4.1.2.1 At least two cooling loops shall be verified to be in operation and circulating reactor coolant at least once per 12 hours.

* All reactor coolant pumps may be de-energized for up to 1 hour provided (1) no operations are permitted that would cause dilution of the reactor coolant system boron concentration and (2) core outlet temperature is maintained at least 10°F below saturation temperature.

BASES

3/4.4.1 REACTOR COOLANT LOOPS

The plant is designed to operate with all reactor coolant loops in operation and maintain DNBR above 1.30 during all normal operations and anticipated transients. In Modes 1 and 2, with one reactor coolant loop not in operation, THERMAL POWER is restricted to $\leq$ 31 percent of RATED THERMAL POWER until the Overtemperature ΔT trip is reset. Either action ensures that the DNBR will be maintained above 1.30. A loss of flow in two loops will cause a reactor trip if operating above P-7 (11 percent of RATED THERMAL POWER) while a loss of flow in one loop will cause a reactor trip if operating above P-8 (31 percent of RATED THERMAL POWER).

In MODE 3, a single reactor coolant loop provides sufficient heat removal capability for removing decay heat; however, due to the initial conditions assumed in the analysis for the control rod bank withdrawal from a subcritical condition, two operating coolant loops are required to meet the DNB design basis for this Condition II event.

In MODES 4 and 5, a single reactor coolant loop or RHR subsystem provides sufficient heat removal capability for removing decay heat; but single failure considerations require that at least two loops be OPERABLE. Thus, if the reactor coolant loops are not OPERABLE, this specification requires two RHR loops to be OPERABLE.

The operation of one Reactor Coolant Pump or one RHR pump provides adequate flow to ensure mixing, prevent stratification and produce gradual reactivity changes during boron concentration reductions in the Reactor Coolant System. The reactivity change rate associated with boron reduction will, therefore, be within the capability of operator recognition and control.

The restrictions on starting a Reactor Coolant Pump with one or more RCS cold legs less than or equal to 275°F are provided to prevent RCS pressure transients, caused by energy additions from the secondary system, which could exceed the limits of Appendix G to 10 CFR Part 50. The RCS will be protected against overpressure transients and will not exceed the limits.

ATTACHMENT B

Safety Evaluation

Proposed Change Request No. 104 amends the Beaver Valley Power Station, Unit No. 1 Technical Specifications, Appendix A to require a minimum of two operating reactor coolant loops during Mode 3 operation.

Description and Purpose of Change

This proposed change will correct the inconsistency between the safety analysis and the technical specification to ensure that the DNB design basis for the postulated bank withdrawal from subcritical event is met.

1. page 3/4 4-2b, Section 3.4.1.2 Reactor Coolant System - Hot Standby has been revised to require the operation of two reactor coolant loops. The surveillance requirements have also been revised to require verification of two operating coolant loops at least once per 12 hours.

2. page B 3/4 4-1, Bases Section 3/4.4.1 Reactor Coolant Loops has been revised to provide the basis for operating two reactor coolant loops during Mode 3 operation.

Basis For Proposed No Significant Hazards Consideration Determination

The proposed change to the Technical Specification will impose more restrictive limitations since the operation of two reactor coolant loops will be required when in Mode 3.

The Commission has provided guidance concerning the application of these standards by providing certain examples (48 FR 14870). One of these, Example (ii), involving no significant hazards consideration is "A change that constitutes an additional limitation, restriction, or control not presently included in the technical specifications." The new requirements match this example, since two reactor coolant loops must now be in operation in Mode 3. Therefore, based on the above example, it is proposed that the change be characterized as involving no significant hazards consideration.

Basis

1. Is the probability of an occurrence or the consequence of an accident or malfunction of equipment important to safety as previously evaluated in the UFSAR increased? No

Reason

The limiting accident for reduced RCS flow conditions applicable to Mode 3 operation is described in UFSAR Section 14.1.1 Uncontrolled Rod Cluster Control Assembly Bank Withdrawal from a Subcritical Condition. The UFSAR does not specifically state the number of reactor coolant loops in operation assumed in the analysis. However, the assumptions used by Westinghouse in the analyses are specified in the UFSAR changes proposed for the N-1 loop operation analysis (C. N. Dunn, DLC to A. Schwencer, NRC dated October 27, 1978). The assumptions are, for the three loop operation case three loops are operating and for the two loop operation case two loops are operating. The UFSAR conclusions remain unchanged; the core and the Reactor Coolant System are not adversely affected, since the combination of thermal power and the coolant temperature result in a DNBR well above the limiting value of 1.30. Therefore, since this proposed change is consistent with the assumptions used in the analyses, the probability of an occurrence or the consequence of an accident or malfunction of equipment important to safety as previously evaluated will not be increased.

2. Is the possibility for an accident or malfunction of a different type than previously evaluated in the UFSAR created? No

Reason

The proposed change will require a minimum of two operating reactor coolant loops when in Mode 3 to reflect the minimum flow assumptions used in the UFSAR accident analysis. Therefore, since the changes are being made to reflect the UFSAR accident analysis, the changes will not create the possibility for a new type of accident or malfunction of a different type than any previously evaluated in the UFSAR.

3. Is the margin of safety as defined in the basis for any Technical Specification reduced? No

Reason

Bases Section 3/4.4.1 Reactor Coolant Loops has been revised to provide a more restrictive basis by requiring two operating reactor coolant loops for Mode 3 operation. Two operating reactor coolant loops are required to meet the DNB design basis for the postulated bank withdrawal from subcritical accident analysis. The proposed bases provide more conservatism due to the added restrictions (two operating reactor coolant loops as opposed to the presently required two operable reactor coolant loops), therefore, the proposed bases change will increase the margin of safety for Mode 3 operation.

4. Based on the above, is an unreviewed safety question involved? No

Conclusion

The proposed changes correct the technical specifications to reflect the flow assumptions used in the safety analysis and ensure that the DNB design basis for the postulated bank withdrawal from subcritical accident is met. Two operating reactor coolant loops are required to ensure that adequate flow is available during Mode 3 operation. The changes are administrative in nature since no physical change to plant safety related systems, components or structures are required; therefore, this change will not increase the likelihood of a malfunction of safety related equipment, increase the consequence of an accident previously analyzed, nor create the possibility of a malfunction different than previously evaluated in the UFSAR.

Based on the considerations addressed above, the proposed changes have been determined to be safe and do not involve an unreviewed safety question.