ATTACHMENT A

Revise Appendix A as follows:

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BORATED WATER SOURCES - OPERATING

LIMITING CONDITION FOR OPERATION

3.1.2.8 As a minimum, the following borated water source(s) shall be OPERABLE as required by Specification 3.1.2.2.

a. A boric acid storage system with:

1. A minimum contained volume of 11,336 gallons,

2. Between 7000 and 7700 ppm of boron, and

3. A minimum solution temperature of 65°F.

b. The refueling water storage tank with:

1. A contained volume between 439,050 gallons and 441,100 gallons of borated water,

2. A boron concentration between 2000 and 2100 ppm, and

3. A minimum solution temperature of 43°F.

APPLICABILITY: MODES 1, 2, 3 & 4.

ACTION:

a. With the boric acid storage system inoperable, restore the storage system to OPERABLE status within 72 hours or be in at least HOT STANDBY and borated to a SHUTDOWN MARGIN equivalent to at least 1% $\Delta k/k$ at 200°F within the next 6 hours; restore the boric acid storage system to OPERABLE status within the next 7 days or be in COLD SHUTDOWN within the next 30 hours.

b. With the refueling water storage tank inoperable, restore the tank to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.1.2.8 Each borated water source shall be demonstrated OPERABLE:

This specification has been DELETED

TABLE 4.12-1 (Continued)

TABLE NOTATION

a. The LLD is the smallest concentration of radioactive material in a sample that will be detected with 95% probability with 5% probability of falsely concluding that a blank observation represents a "real" signal.

For a particular measurement system (which may include radiochemical separation):

$$LLD = \frac{4.66\ S_b}{(E)\ (V)\ (2.22)\ (Y)\ \exp(-\lambda \Delta T)}$$

where:

LLD is the lower limit of detection as defined above (as pCi per unit mass or volume);

S_b is the standard deviation of the background counting rate or of the counting rate of a blank sample as appropriate (as counts per minute);

E is the counting efficiency (as counts per transformation);

V is the sample size (in units of mass or volume);

2.22 is the number of transformations per minute per picocurie;

Y is the fractional radiochemical yield (when applicable);

λ is the radioactive decay constant for the particular radionuclide;

ΔT is the elapsed time between sample collection (or end of the sample collection period) and time of counting (for environmental samples, not plant effluent samples).

The value of S_b used in the calculation of the LLD for a detection system shall be based on the actual observed variance of the background counting rate or of the counting rate of the blank samples (as appropriate) rather than on an unverified theoretically predicted variance. In calculating the LLD for a radionuclide determined by gamma-ray spectrometry, the background shall include the typical contributions of other radionuclides normally present in the samples (e.g., potassium-40 in milk samples). Typical values of E, V, Y and ΔT should be used in the calculations.

3/4.1.1.4 MODERATOR TEMPERATURE COEFFICIENT (MTC) (Continued)

fuel cycle. The surveillance requirement for measurement of the MTC at the beginning and near the end of each fuel cycle is adequate to confirm the MTC value since this coefficient changes slowly due principally to the reduction in RCS boron concentration associated with fuel burnup.

3/4.1.1.5 MINIMUM TEMPERATURE FOR CRITICALITY

This specification ensures that the reactor will not be made critical with the Reactor Coolant System average temperature less than 541°F. This limitation is required to ensure 1) the moderator temperature coefficient is within its analyzed temperature range, 2) the pressurizer is capable of being in an OPERABLE status with a steam bubble, 3) the reactor pressure vessel is above its minimum NDTT temperature and 4) the protective instrumentation is within its normal operating range.

3/4.1.2 BORATION SYSTEMS:

The boron injection system ensures that negative reactivity control is available during each mode of facility operation. The components required to perform this function include 1) borated water sources, 2) charging pumps, 3) separate flow paths, 4) boric acid transfer pumps, 5) associated heat tracing systems, and 6) an emergency power supply from OPERABLE diesel generators.

With the RCS average temperature above 200°F, a minimum of two separate and redundant boron injection systems are provided to ensure single functional capability in the event an assumed failure renders one of the systems inoperable. Allowable out-of-service periods ensure that minor component repair or corrective action may be completed without undue risk to overall facility safety from injection system failures during the repair period.

The required volume of water in the refueling water storage tank for reactivity considerations while operating is 424,000 gallons. The associated technical specification limit on the refueling water storage tank has been established at 441,100 gallons to account for reactivity considerations and the NPSH requirements of the ECCS system.

The OPERABILITY of the RWST as part of the ECCS ensures that a sufficient supply of borated water is available for injection by the ECCS in the event of a LOCA. The limits on RWST minimum volume and boron concentration ensure that 1) sufficient water is available within containment to permit recirculation cooling flow to the core, and 2) the reactor will remain subcritical in the cold condition following mixing of the RWST and the RCS water volumes with all control rods inserted except for the most reactive control assembly. These assumptions are consistent with the LOCA analysis.

BORON INJECTION SYSTEM (Continued)

The analysis of a main steam pipe rupture is performed to demonstrate that the following criteria are satisfied:

1. Assuming a stuck rod cluster control assembly, with or without offsite power, and assuming a single failure in the engineered safeguards, there is no consequential damage to the primary system and the core remains in place and intact.

2. Energy release to containment from the worst steam pipe break does not cause failure of the containment structure.

3. Radiation doses are not expected to exceed the guidelines of the 10CFR100.

The limits on injection tank minimum volume and boron concentration ensure that the assumptions used in the steam line break analysis are met.

Verification of 120°F in the injection flow path assures an 8-hour margin to the time at which precipitation of a 7700 ppm boric acid solution would occur without benefit of the building heating system.

Verifying the recirculation flow path and stagnant piping temperatures, when the Boron Injection Flow Path temperature is less than 120°F and greater than 65°F, by monitoring the ambient air temperatures in the building areas containing that piping provides assurance that boron precipitation will not occur.

3/4.5.5 REFUELING WATER STORAGE TANK (RWST)

This specification has been DELETED

This specification has been DELETED.

ATTACHMENT B

Safety Evaluation

Proposed Change Request No. 108 amends the Beaver Valley Power Station, Unit No. 1 Technical Specifications, Appendix A to incorporate administrative changes to correct errors and provide clarification for consistency throughout the technical specifications.

Description of amendment request: The proposed amendment requests a revision to delete Section 3.5.5, Refueling Water Storage Tank (RWST) from the ECCS portion of the technical specifications and incorporate the requirements into Section 3.1.2.8.b, Borated Water Sources - Operating. Table 4.12-1 has been revised to correct an editorial error by adding the factor S_b to the equation. Section 6.13, Environmental Qualification, has been deleted.

Basis for proposed no significant hazards consideration determination: The Commission has provided guidance concerning the application of standards for determining whether a significant hazards consideration exists by providing certain examples (48 CFR 14870). One example of an amendment that is considered not likely to involve a significant hazards consideration is "(i) A purely administrative change to the technical specifications; for example, a change to achieve consistency throughout the technical specifications, correction of an error, or a change in nomenclature".

The present Section 3.1.2.8.b requirements do not specify the range for boron concentration or contained volume of the RWST. Incorporating the range into specification 3.1.2.8.b will achieve consistency since the Limiting Conditions for Operation, Applicability, Action and Surveillance Requirements are identical for both specifications. Therefore, specification 3.5.5 is no longer required and should be deleted to reduce confusion involved with satisfying the RWST surveillance requirements. The Bases of Section 3.5.5 has been deleted and incorporated into the Bases of Section 3/4.1.2 to achieve consistency by providing the basis for and description of the RWST when required for operability of the ECCS. These changes are not a safety concern since they do not affect the operation or testing of the ECCS as described in UFSAR Section 6.3.

Correction of the editorial error in Table 4.12-1 is an administrative change, not a safety concern and does not affect the UFSAR.

Deleting Section 6.13 complies with the final rule for removal of the June 30, 1982 deadline for qualification of all safety-related electrical equipment published in the Federal Register, November 19, 1984 (49 FR 45571). The Commission has determined that retention of the 1982 deadline would serve no purpose and should be removed. This change is not a safety concern and does not affect the UFSAR.

Therefore, based on the above example, it is proposed that the change be characterized as involving no significant hazards consideration.