

ATTACHMENT A

Beaver Valley Power Station, Unit No. 2
License Amendment Request No. 130

The following page is affected:

Affected Page: 3/4 1-15

REACTIVITY CONTROL SYSTEMSBORATED WATER SOURCES - OPERATINGLIMITING 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 13,390 gallons,
2. Between 7000 and 7700 ppm of boron, and
3. A minimum solution temperature of 65°F.

usable

b. The refueling water storage tank with:

1. A minimum contained volume of 859,248 gallons,
2. A boron concentration between 2000 and 2100 ppm, and
3. A solution temperature of $\geq 45^\circ\text{F}$ and $\leq 50^\circ\text{F}$.

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:

ATTACHMENT B

Beaver Valley Power Station, Unit No. 2
License Amendment Request No. 130
REFUELING WATER STORAGE TANK AND BAT CONTAINED VOLUME

A. DESCRIPTION OF AMENDMENT REQUEST

The proposed amendment would change "contained" to "usable" in two places in Technical Specification (TS) 3.1.2.8. This would eliminate the potential for a non-conservative interpretation of the specification values for the Refueling Water Storage Tank (RWST) and the Boric Acid Storage System (BAT) "minimum contained volumes" and would eliminate the need for plant administrative controls. The term "usable" is synonymous with the term "deliverable" used in other documents.

The Unit No. 2, TS 3.1.2.8 values of 859,248 gallons (RWST) and 13,390 gallons (BAT) for "minimum contained volumes" represent only the usable tank volumes and do not include the unusable volumes of 31,824 gallons and 1356 gallons, respectively. The unusable volume is that portion of the tank volume that lies below the Quench Spray pump suction line in the RWST. The BAT unusable volume is derived based on the Boric Acid Transfer Pump suction piping tank centerline height plus the piping inside radius. Applying this height gives a volume of 564 gallons, then adding this to the 114 gallons derived for the tank slope gives an unusable volume of 678 gallons per tank. The combined unusable volume for both BATs equals 1356 gallons.

Currently, administrative controls exist for Unit No. 2 to control the minimum tank levels above those which would supply a minimum contained volume of 891,072 gallons (859,248 gallons usable) in the RWST and 14476 gallons (13,390 gallons usable) in the BAT. This ensures that the minimum usable volume as required to meet accident analysis is met.

B. DESIGN BASES

The current technical specification value is inconsistent with the generally accepted meaning of "contained volume" which is the total volume of the tank including any unusable volume. This is consistent with NUREG 1431, Revision 1 which states the following in bases section, B 3.5.4:

"For the RWST, the deliverable volume is different from the total contained since, due to the design of the tank, more water can be contained than delivered."

Unit No. 1 TS 3.1.2.8.b.1 states: "A contained volume between 439,050 gallons and 441,100 gallons of borated water." The Unit No. 1 value of 439,500 gallons correctly represents the minimum contained volume and consists of a usable volume (analysis value) of 430,500 gallons plus an unusable volume of 8,550 gallons.

C. JUSTIFICATION

This change is administrative in nature. It clarifies the requirements such that the specified minimum values will be "usable" rather than "total contained." This will eliminate the potential for a non-conservative interpretation of the specification.

The current surveillance tests include administrative controls to verify the correct RWST and BAT "minimum contained volume." These controls are covered by an active Basis for Continued Operation (BCO).

D. SAFETY ANALYSIS

Unit No. 2 TS 3.1.2.8 has been modified to change the word "contained" to "usable" in two places. This will eliminate the potential for a non-conservative interpretation of the specification values for RWST and BAT "minimum contained volumes" and will eliminate the need for plant administrative controls.

As written, the specification is subject to misinterpretation leading to a non-conservative level being maintained in the RWST and BAT. A BCO was written and implemented to ensure that this misinterpretation could not happen. This license amendment will permanently implement the BCO requirements and eliminate the BCO.

Since this is an editorial change only, no plant systems or equipment are affected. Furthermore, this change does not affect the UFSAR accident analyses, and the change is in the conservative direction. Therefore, this change has been determined to be safe and will not reduce the safety of the plant.

E. NO SIGNIFICANT HAZARDS EVALUATION

The no significant hazard considerations involved with the proposed amendment have been evaluated, focusing on the three standards set forth in 10 CFR 50.92(c) as quoted below:

The Commission may make a final determination, pursuant to the procedures in paragraph 50.91, that a proposed amendment to an operating license for a facility licensed under paragraph 50.21(b) or paragraph 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or

- (3) Involve a significant reduction in a margin of safety.

The following evaluation is provided for the no significant hazards consideration standards.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed Limiting Condition for Operation (LCO) change will assure that the Refueling Water Storage Tank (RWST) minimum usable volume is maintained consistent with that required by accident analysis. The safety function of the RWST will not differ in any way from its normal operational mode. The normal operation of plant equipment is not a precursor to any accident. Therefore, operation of equipment under this change will not increase the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed amendment will not change the physical plant or the modes of plant operation defined in the operating license. The change does not involve the addition or modification of equipment nor does it alter the design or operation of plant systems. The proposed change will help to ensure that the analysis value of minimum contained volume is available, so that the RWST can perform its safety function.

Therefore, operation of the facility in accordance with the proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the change involve a significant reduction in a margin of safety?

RWST: The basis for TS 3.1.2.8.b is to ensure adequate water for the Emergency Core Cooling System to respond to a Large Break Loss Of Coolant Accident; supply the containment with cooling spray flow; supply the containment sump with adequate water for Recirculation Spray pump suction head concerns; and to provide adequate boron to shut down the core. This change will ensure that the proper tank volume is maintained to support the Design Basis Accident (DBA) analysis.

BAT: These tanks are credited for ensuring adequate Shutdown Margin in the event that the unit has to initiate an emergency shutdown. Additional requirements are derived for the postulated Anticipated Transient Without Scram event.

This change will ensure that the proper tank volume is maintained to support the DBA analysis.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

F. NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the considerations expressed above, it is concluded that the activities associated with this license amendment request satisfy the requirements of 10 CFR 50.92(c) and, accordingly, a no significant hazards consideration finding is justified.

G. ENVIRONMENTAL CONSIDERATION

This license amendment request changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. It has been determined that this license amendment request involves no significant increase in the amounts, and no significant change in the types of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. This license amendment request may change requirements with respect to installation or use of a facility component located within the restricted area or change an inspection or surveillance requirement; however, the category of this licensing action does not individually or cumulatively have a significant effect on the human environment. Accordingly, this license amendment request meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this license amendment request.

H. UFSAR CHANGES

No UFSAR changes are required.