

*Exelon Generation Company, LLC, and PSEG Nuclear LLC, Docket No. 50-278, Peach Bottom Atomic Power Station, Unit 3, York County and Lancaster County, Pennsylvania*

*Date of amendment request:* June 23, 2003.

*Description of amendment request:* Exelon Generation Company, LLC, the licensee, is proposing a change to the Peach Bottom Atomic Power Station (PBAPS), Unit 3, Technical Specifications (TSs) contained in Appendix A to the Operating License. This proposed change will revise the TS section on safety limits to incorporate revised safety limit minimum critical power ratios (SLMCPRs) based on the cycle-specific analysis performed by Global Nuclear Fuel for PBAPS, Unit 3, Cycle 15.

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration. The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the licensee's analysis against the standards of 10 CFR 50.92(c). The NRC staff's review is presented below.

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

Changing the SLMCPRs does not require any physical plant modifications, physically affect any plant components, or involve changes in plant operation. Therefore, the probability of an accident previously evaluated remains unchanged.

The operability of plant systems designed to mitigate any consequences of accidents has not changed, therefore, the consequences of an accident previously evaluated are not expected to increase.

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

The proposed change does not involve any modifications of the plant configuration for allowable modes of operation. The SLMCPRs are not accident initiators, and their revision will not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

The proposed SLMCPRs provide a margin of safety by ensuring that no more than 0.1% of the rods are in a boiling transition if the operating limit minimum critical power ratios are

violated during all modes of operation. The change in the SLMCPRs continues to ensure that during normal operation and during abnormal operational transients, at least 99.9% of all fuel rods in the core do not experience transition boiling if the limit is not violated when all uncertainties are considered, thereby preserving the fuel cladding integrity. Therefore, the proposed TS change will not involve a significant reduction in a margin of safety.

Based on the NRC staff's review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

*Attorney for licensee:* Mr. Edward Cullen, Vice President & General Counsel, Exelon Generation Company, LLC, 300 Exelon Way, Kennett Square, PA 19348.

*NRC Section Chief:* James W. Clifford.

*FirstEnergy Nuclear Operating Company, et al., Docket No. 50-334, Beaver Valley Power Station, Unit No. 1 (BVPS-1), Beaver County, Pennsylvania*

*Date of amendment request:* June 24, 2003.

*Description of amendment request:* The proposed amendments would change the Technical Specification (TS) steam generator tube inspection definition such that the definition of tube inspection would exclude the portion of the tube within the tubesheet below the W\* distance and would change the tube plugging criteria to indicate that the plugging or repair criteria does not apply to service-induced degradation identified in the W\* distance. Service-induced degradation identified in the W\* distance would be repaired upon detection. The W\* distance is defined in Westinghouse Topical Report, WCAP-14797, Revision 1, and is the distance from the top of the tubesheet to the bottom of the W\* length including the distance to the bottom of the WEXTEx transition (approximately 0.25 inches from the top of the tubesheet) plus uncertainties. This equals approximately 7.12 inches on the hot leg side plus the distance to the bottom of the WEXTEx transition and 7.62 inches on the cold leg side plus the distance to the bottom of the WEXTEx transition.

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

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

No. The proposed change modifies the BVPS Unit 1 TSs to incorporate [an] SG [steam generator] tube inspection scope based on WCAP-14797, Revision 1. The proposed change only clarifies the current process which has been utilized in the past. The W\* analysis takes into account the reinforcing effect that the tubesheet has on the external surface of an expanded SG tube. Tube-bundle integrity will not be adversely affected by the implementation of the W\* tube inspection scope. SG tube burst or collapse cannot occur within the confines of the tubesheet; therefore, the tube burst and collapse criteria of Regulatory Guide (RG) 1.121 are inherently met. Any degradation below the W\* distance is shown by analysis and test results to be acceptable, and therefore does not result in an increase in probability of a tube rupture or an increase in the consequences of a tube rupture.

Tube burst is precluded for cracks within the tubesheet by the constraint provided by the tubesheet. However, in the unlikely event of a complete circumferential separation of a tube occurring below the W\* distance, SG tube pullout is precluded, tube integrity is maintained and leakage is predicted to be maintained within the Updated Final Safety Analysis Report limits during all plant conditions.

In conclusion, the incorporation of the W\* inspection scope into BVPS Unit 1 TS[s] maintains existing design limits and does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

No. The proposed change modifies the BVPS Unit 1 TSs to incorporate SG tube inspection scope based on WCAP-14797, Revision 1. Tube-bundle integrity will be maintained during all plant conditions upon implementation of the proposed tube inspection scope. Use of this scope does not induce a new mechanism that would result in a different kind of accident from those previously analyzed. Even with the limiting circumstances of a complete circumferential separation of a tube occurring below the W\* distance, SG tube pullout is precluded and leakage is predicted to be maintained within the design limits during all plant conditions.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

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

No. WCAP-14797, Revision 1 describes the testing that was performed to define the length of non-degraded tubing that is sufficient to compensate for the axial forces on the tube and thus prevent pullout. The operating conditions utilized in WCAP-14797, Revision 1, bound BVPS Unit 1 operating conditions. Upon implementation of the W\* inspection scope, operation with potential cracking below the W\* distance in