

flexibility and increased thermal margin provided with this design.

The redundant cooling capacity of the SW and SRW Systems have not been altered. Furthermore, the proposed activity will not change, degrade, or prevent actions described or assumed in any accident described in the UFSAR. The proposed activity will not alter any assumptions previously made in evaluating the radiological consequences of any accident described in the UFSAR. Therefore, the consequences of an accident previously evaluated in the UFSAR have not increased.

Therefore, the proposed modification does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Would not create the possibility of a new or different type of accident from any accident previously evaluated.

The proposed activity involves modifying the SW and SRW System components necessary to support the installation of new SRW heat exchangers. None of the systems associated with this modification are identified as accident initiators in the UFSAR. The SW and SRW Systems are used to mitigate the effects of accidents analyzed in the UFSAR. None of the functions required of the SRW or SW System have been changed by this modification. This activity does not modify any system, structure, or component such that it could become accident initiator, as opposed to its current role as an accident mitigator.

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

3. Would not involve a significant reduction in a margin of safety.

The Safety design basis for the SW and SRW System is the availability of sufficient cooling capacity to ensure continued operation of equipment during normal and accident conditions. The redundant cooling capacity of these systems, assuming a single failure, is consistent with assumptions used in the accident analysis.

The design, procurement, installation, and testing of the equipment associated with the proposed modification are consistent with the applicable codes and standards governing the original systems, structures, and components. The design of instruments and associated cabling ensures that physical and electrical separation of the two subsystems is maintained. Common-mode failure is not introduced by the activity. The equipment is qualified for the service conditions stipulated for that environment. New cable and raceways for this design will be installed in accordance with seismic design requirements. The additional electrical load has been reviewed to ensure the load limits for the vital 1E buses are not exceeded. The circuits and components related to the control valves control loops are safety-related, are similar to those used for the other safety-related flow control functions. The proposed modification will not have any adverse effects on the safety-related functions of the SW and SRW Systems.

For the above reasons, the existing licensing bases have not been altered by the

proposed modification. This activity will not reduce the margin of safety as it exists now. In fact, the margin of safety has been increased by this activity due to the increase in the thermal capacity of the dual train design (i.e., two heat exchangers per train versus one heat exchanger per train of the original design) and the increased availability of safety-related components.

Therefore, this proposed modification does not significantly reduce the margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

*Local Public Document Room location:* Calvert County Library, Prince Frederick, Maryland 20678.

*Attorney for licensee:* Jay E. Silberg, Esquire, Shaw, Pittman, Potts and Trowbridge, 2300 N Street, NW., Washington, DC 20037.

*NRC Project Director:* S. Singh Bajwa, Director.

*Duquesne Light Company, et al., Docket Nos. 50-334 and 50-412, Beaver Valley Power Station, Unit Nos. 1 and 2, Shippingport, Pennsylvania*

*Date of amendment request:* July 13, 1998.

*Description of amendment request:* The proposed amendments would revise the Beaver Valley Power Station, Unit Nos. 1 and 2 (BVPS-1 and BVPS-2) Updated Final Safety Analysis Report (UFSAR) descriptions of the Intake Structure main entrance and interconnecting cubicle doors. The current UFSAR descriptions state that the cubicle access doors are open to permit excess water from a major pipe rupture to flow out of the cubicles thereby avoiding internal flooding. The proposed changes would address a new failure mode of safety-related equipment that had not been previously considered for BVPS-1. The proposed changes would state that the cubicle interconnecting flood protection doors are normally closed with their inflatable seals depressurized and that the associated security/fire doors are normally closed. The proposed door closure arrangement is intended to protect the safety-related equipment in the interconnecting cubicles from the consequences of potential internal flooding.

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

The proposed change revises the text of the UFSAR for Unit 1 and Unit 2 to describe how protection is provided against potential internal floods in the cubicles that house the Unit 1 River Water and Unit 2 Service Water Pumps. The previous description concluded that the Unit 1 River Water pumps were protected because open cubicle access doors will permit excess water to flow out of the cubicles. The practice that has changed, and is described in the proposed revisions to the Unit 1 and Unit 2 UFSARs, will provide protection of the Unit 1 River Water Pumps and the Unit 2 Service Water Pumps so that no flooding event can adversely affect more than one Unit 1 or Unit 2 pump. Therefore, it can be concluded that the proposed changes do not involve any increase in 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 effect of flooding the pump cubicles was considered in BVPS-1 to have no adverse effect because open cubicle access doors would permit excess water to flow out of the cubicles, and pipe cracks in moderate energy piping was not part of the design basis. Revising the door arrangement described in the BVPS-1 UFSAR such that the security/fire doors are normally closed, requires that the effects of flooding be considered. Engineering analysis shows that a moderate energy pipe crack, (i.e., the BVPS-2 design basis internal flood), produces a leak rate of 1162 gpm, which results in a maximum water level of 0.82 feet, with the security/fire doors closed. The water level in the adjacent cubicle would reach a level at 0.37 feet. This is below the level which would cause failures of the MCCs [Motor Control Centers] in the pump cubicles.

The maximum leak rate from a failure of a Unit 1 rubber expansion joint in a pump cubicle would result in water rising to a level which would cause the MCCs to be flooded and fail; therefore, maintaining the flood door between the adjacent cubicles closed limits the impact to a single train.

Failure of a single train of River Water is analyzed in the USAR; therefore, this change would not introduce a new or different type of accident.

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

The proposed change in the Unit 1 and Unit 2 UFSARs describes how protection is provided for the Unit 1 River Water, and the Unit 2 Service Water pumps. Protection of the Unit 1 River Water Pumps and the Unit 2 Service Water pumps is provided so that no flooding event can adversely affect more than one Unit 1 or Unit 2 pump. Therefore, it can be concluded that the proposed changes do not involve any reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are