

Mr. L. W. Myers  
Senior Vice President  
Beaver Valley Power Station  
Post Office Box 4  
Shippingport, PA 15077

January 24, 2000

TEMPLATE: NRC-101

**SUBJECT: BEAVER VALLEY 1 AND 2 - CHANGES TO THE BASES OF THE TECHNICAL SPECIFICATIONS (TAC NOS. MA5073 AND MA5074)**

Dear Mr. Myers:

By letter dated March 16, 1999 (L-99-045), and supplemented by letter dated November 19, 1999 (L-99-166), Duquesne Light Company (DLC) submitted proposed changes to the Bases for Technical Specifications (TSs) 3/4.7.13 of Beaver Valley Power Station, Unit Nos. 1 and 2 (BVPS-1 and BVPS-2). The proposed Bases changes insert information which provides greater detail of the design bases of the Auxiliary River Water System for BVPS-1 and the Standby Service Water System for BVPS-2. Additionally, wording would be added to discuss the basis for the requirements of Limiting Condition For Operation (LCO) 3.7.13 and required actions should this LCO not be met.

On the dates of the March 16, and November 19, 1999, letters, DLC was the licensed operator for BVPS-1 and BVPS-2. On December 3, 1999, DLC's ownership interests in both BVPS-1 and BVPS-2 were transferred to the Pennsylvania Power Company (Penn Power), and DLC's operating authority for BVPS-1 and BVPS-2 was transferred to FirstEnergy Nuclear Operating Company (FENOC). By letter dated December 13, 1999, FENOC requested that the Nuclear Regulatory Commission (NRC) continue to review and act upon all requests before the Commission which had been submitted by DLC.

Accordingly, the NRC staff has completed its review of the proposed changes to the Bases for BVPS-1 and BVPS-2 TS 3/4.7.13 and we have no objections to the proposed changes. Copies of the revised Bases pages are enclosed for your use.

Sincerely,

/s/

Daniel S. Collins, Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosures: BVPS-1 TS page B3/4 7-7 and  
BVPS-2 TS pages XII, B 3/4 7-6, and B 3/4 7-7

cc w/encl: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

January 24, 2000

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Senior Vice President  
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Sincerely,

A handwritten signature in black ink, appearing to read "Daniel S. Collins".

Daniel S. Collins, Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosures: BVPS-1 TS page B3/4 7-7 and  
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cc w/encl: See next page

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BASES

3/4.7.13 AUXILIARY RIVER WATER SYSTEM (ARWS)

The operability of the ARWS ensures that sufficient cooling capacity is available to bring the reactor to a cold shutdown condition in the event that a barge explosion at the station's intake structure or any other extremely remote event would render all of the normal River Water System supply pumps inoperable. The scenario of a postulated gasoline barge impact with the intake structure and coincident explosion disabling the Reactor Plant River Water System (RPRWS) is a low probability event. Nonetheless, the ARWS provides defense in-depth in assuring shutdown cooling capability. The requirement to operate the ARWS is not coincident with a postulated Design Basis Accident, but only for the postulated gasoline barge impact event.

Although the ARWS is a manually operated non-safety system which is not required to meet single active failure criteria, the system is designed with redundant pumps and valves on a header to accommodate a single active failure on start-up. This design criteria provides a defense in-depth in order to ensure the system can adequately mitigate the consequences of the postulated event. An ARWS pump can be manually started on the emergency bus during loss of offsite power after the diesel loading sequence is complete. If there is a delay in starting the ARWS, the auxiliary feedwater system is available to remove reactor core decay heat for a short term period.

The requirements for subsystem OPERABILITY are similar to those of the RPRWS except that one subsystem is required to be OPERABLE in the MODES noted. The Limiting Condition for Operation reflects the low risk of the postulated event compared to more stringent requirements associated with safety related systems. The ACTION statement takes into account the low probability of both trains of RPRWS being disabled as a result of the postulated site scenario coincident with one of the ARWS subsystems being OPERABLE.

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BASES

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SNUBBERS (Continued)

inservice functional testing, that snubber may be exempted from being counted as inoperable. Generically susceptible snubbers are those which are of a specific make or model and have the same design features directly related to rejection of the snubber by visual inspection, or are similarly located or exposed to the same environmental conditions such as temperature, radiation and vibration.

When a snubber is found inoperable, an engineering evaluation is performed, in addition to the determination of the snubber mode of failure, in order to determine if any safety-related component or system has been adversely affected by the inoperability of the snubber. The engineering evaluation shall determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the supported component or system.

To provide assurance of snubber functional reliability, a representative sample of the installed snubbers will be functionally tested during plant shutdowns at refueling or 18 month intervals not to exceed two (2) years. Observed failures of these sample snubbers shall require functional testing of additional units.

Snubbers are classified and grouped by design and manufacturer but not by size. For example, mechanical snubbers utilizing the same design features of the 2-kip, 10-kip and 100-kip capacity manufactured by Company "A" are of the same type. The same design mechanical snubbers manufactured by Company "B" for the purposes of this Technical Specification would be of a different type, as would hydraulic snubbers from either manufacturer.

The service life of a snubber is evaluated via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubber, seal replaced, spring replaced, in high radiation area, in high temperature area, etc...). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life. The requirements for the maintenance of records and the snubber service life review are not intended to affect plant operation.

BASES

3/4.7.13 STANDBY SERVICE WATER SYSTEM (SWE)

The OPERABILITY of the SWE ensures that sufficient cooling capacity is available to bring the reactor to a cold shutdown condition in the event that a barge explosion at the station's intake structure or any other extremely remote event would render all of the normal Service Water System (SWS) supply pumps inoperable. The scenario of a postulated gasoline barge impact with the intake structure and coincident explosion disabling the SWS is a low probability event. Nonetheless, the SWE provides defense in-depth in assuring shutdown cooling capability. The requirement to operate the SWE is not coincident with a postulated Design Basis Accident, but only for the postulated gasoline barge impact event.

Although the SWE is a non-safety system which is not required to meet single active failure criteria, the system is designed with redundant pumps and valves on a header to accommodate a single active failure on start-up. This design criteria provides a defense in-depth in order to ensure the system can adequately mitigate the consequences of the postulated event. An SWE pump can be manually started on the emergency bus during loss of offsite power after the diesel loading sequence is complete. With no loss of power signal present, the SWE is automatically started upon receipt of low service water header pressure signal. This feature is provided to prevent inadvertent plant trip on loss of running service water pump and is not required for the design basis event. If there is a delay in starting the SWE, the auxiliary feedwater system is available to remove reactor core decay heat for a short term period.

The requirements for subsystem OPERABILITY are similar to those of the SWS except that one subsystem is required to be OPERABLE in the MODES noted. The Limiting Condition for Operation reflects the low risk of the postulated event compared to more stringent requirements associated with safety related systems. The ACTION statement takes into account the low probability of both trains of SWS being disabled as a result of the postulated scenario coincident with one of the SWE subsystems being OPERABLE.