May 7, 2002

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

SUBJECT: BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 - CORRECTION TO SAFETY EVALUATION (SE) RELATED TO AMENDMENT NOS. 246 AND 124 REGARDING PHASE 1 CONVERSION TO IMPROVED STANDARD TECHNICAL SPECIFICATIONS (TAC NOS. MB4483 AND MB4484, AMENDMENTS 246 AND 124 WERE ISSUED UNDER TAC NOS. MB1577 AND MB1579)

Dear Mr. Myers:

The Nuclear Regulatory Commission (NRC) issued Amendment No. 246 to Facility Operating License No. DPR-66 and Amendment No. 124 to Facility Operating License No. NPF-73 for Beaver Valley Power Station (BVPS, the licensee), Unit Nos. 1 and 2, on January 24, 2002 (ADAMS Accession No. ML013320464), in response to your application dated March 28, 2001, as supplemented May 1, 2001, and June 13, 2001. These amendments relocated certain Beaver Valley technical specifications (TSs) to the Licensing Requirements Manual or to the Offsite Dose Calculation Manual consistent with the criteria of Title 10 of the *Code of Federal Regulations,* Section 50.36.

Following receipt of Amendment Nos. 246 and 124, you notified the NRC by letter dated February 27, 2002, that the SE contained several statements that required clarification. The enclosure provides new SE pages reflecting the appropriate changes. During its review, NRC staff noted and corrected one additional spelling error on page 5 of the SE.

Sincerely,

/RA/

Daniel 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

Enclosure: Revised pages 2, 4, and 5 of SE for Amendment Nos. 246 and 124 dated January 24, 2002, for BVPS Unit Nos. 1 and 2

cc w/encl: See next page

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cc w/encl: See next page

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PDI-1 Reading	DCollins	BPlatchek, RGN-I	RDennig
SRichards	OGC	ACRS	MO'Brien (2)
RLaufer	GHill (4)	PHearn	EThomas

Accession No.: ML021060733 *see previous concurrence

OFFICE	PDI-1/PM	PDI-1/PM	PDI-2/LA	RORP	OGC	PDI-1/SC
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DATE	5/7/02	5/7/02	5/7/02	04/30/02	05/02/02	5/7/02

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Beaver Valley Power Station, Units 1 and 2

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The NRC policy statement endorsed the criteria for evaluating the content of the TSs. The criteria were used by the NRC and industry working groups to develop the content of the ISTS for each of the industry owner groups. The resulting ISTS applicable to Westinghouse plants are found in NUREG-1431, "Standard Technical Specifications - Westinghouse Plants."

The policy statement defines four screening criteria for determining which of the TS requirements should be retained and which could be relocated from the license. The four TS screening criteria contained in the policy statement were subsequently incorporated into 10 CFR 50.36 on July 19, 1995 (60 CFR 36953). The policy statement describes the advantages of adopting the ISTS and applying the application criteria for screening the existing TSs. The advantages noted in the policy statement include the clarification of the scope and purpose of the TSs and the enhancement of safe operation by focusing the licensee's and plant operator's attention on those plant conditions that are most important to safety. In addition, the policy statement also noted that these improvements to the TSs should result in more efficient use of NRC and industry resources.

The policy statement also explains that TS requirements that do not meet any of the four screening criteria may be proposed for removal from the TS and relocated to licensee-controlled documents. In NRC Administrative Letter (AL) 96-04, "Efficient Adoption of Improved Standard Technical Specifications," the NRC recommends acceptable methods for relocating TS requirements that do not meet the policy statement screening criteria. AL 96-04 recommends that relocated TS requirements be moved to "....licensee-controlled documents for which there is an applicable regulatory process for future changes." Documents that are referenced in the Updated Final Safety Analysis Report (UFSAR) are identified in AL 96-04 as acceptable locations for TS requirements that do not meet the policy statement screening criteria.

This amendment request also proposed to add a TS Bases control program (Section 5.5.14 of NUREG-1431); however, the licensee requested in their June 13, 2001, letter that this part of the amendment be approved early to support another licensing request. The NRC approved this requested change on July 20, 2001, in Amendment Nos. 239 and 120 for BVPS-1 and 2, respectively.

3.0 EVALUATION

The NRC staff's review of the proposed changes to the BVPS-1 and 2 TSs evaluates the compliance of these changes with the criteria of the NRC policy statement, as codified in 10 CFR 50.36, and with the ISTS for Westinghouse plants. The Final Policy Statement criteria are as follows:

Criterion 1 — Installed instrumentation that is used to detect and indicate in the control room a significant abnormal degradation of the reactor coolant pressure boundary.

Criterion 2 — A process variable, design feature, or operating restriction that is an initial condition of a design-basis accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to fission product barrier integrity.

relationships to DBAs. The CTS contains redundant requirements for some components in the boration system section and the emergency core cooling system (ECCS) section. The licensee proposes to relocate the boration system requirements for the charging pumps (both operating and shutdown) and the refueling water storage tank (RWST) (shutdown) from the CTS and to retain the corresponding ECCS requirements in the ISTS ECCS section consistent with the applicable criteria; however, the requirements for the RWST are only contained in the BVPS boration systems TS 3.1.2.8, “Borated Water Sources - Operating.” This BVPS TS contains the requirements for the boric acid storage system and the RWST applicable in Modes 1-4. Since this is the only BVPS TS to contain requirements for the RWST applicable in Modes 1-4, TS 3.1.2.8 has an additional design basis ECCS that is separate from the boration systems design basis. The ECCS design basis of the RWST meets the policy statement Criterion 3 for retention in the TS. The RWST portion of TS.3.1.2.8 is not proposed for relocation and will be retained in the TS due to the RWST ECCS design-basis applicability. The RWST requirements retained in BVPS TS 3.1.2.8 effectively address the ECCS function of the RWST in a manner similar to the ISTS requirements for the RWST. The NRC staff finds the proposed relocation to be in accordance with 10 CFR 50.36 and to be acceptable.

Reactivity Control System

CTS 3/4.1.3.3, "Position Indication System - Shutdown" (Units 1 and 2)

The position indication system consists of individual rod position indicators and demand indicators. The individual rod position indication system in Unit 1 is based on an analog design and the system in Unit 2 utilizes a digital design. In Modes 1 and 2, both the individual and demand position indicators are required to be operable.

The position indication system provides indication of rod position to the operator which is used by the operator to verify that the rods are correctly positioned. In operating Modes (1 and 2), this indication is used during reactor startup and operation to monitor rod position in order to verify insertion and alignment limits are met (initial conditions of DBAs) and to verify that the rods are fully inserted into the core immediately following a reactor trip. However, in the shutdown Modes addressed by TS 3.1.3.3, "Position Indication System - Shutdown," the position indication provides information only and is not relied on by the operators to verify rod insertion or alignment or reactor trip since these functions are required only in Modes 1 and 2. Since applicable criteria are only met in Modes 1 and 2, CTS 3/4.1.3.3, "Position Indication System - Shutdown," will be relocated from the TSs to the LRM. The NRC staff finds the relocation acceptable

Special Test Exceptions

CTS 3/4.10.5, "Position Indication System - Shutdown" (Unit 2 only)

CTS 3.10.5 allows for an exception to the operability requirements of the Unit 2 digital rod position indication system during shutdown conditions. The exception is required during rod drop time measurements since the data necessary to determine the rod drop time are derived from the induced voltage in the position indicator coils as the rod is dropped. This induced voltage is minuscule compared to the normal voltage and cannot be observed if the position indication systems remain operable. Since CTS 3/4.10.5 does not contain requirements that

are assumed in a DBA or transient, this CTS does not satisfy any of the screening criteria and is being relocated to the LRM. The NRC staff finds the proposed relocation acceptable.

CTS 3/4.3.3.1, "Monitoring Instrumentation Radiation Monitoring"

The monitors proposed for relocation from the BVPS TSs are listed in Table 2 of the licensee's amendment application. The selected radiation monitors consist of area and noble gas effluent monitor types. Area radiation monitors provide continuous surveillance of radiation levels in the selected areas of the plant outside the control room. The areas monitored include locations that may be occupied by operating personnel and that may be exposed to significant radiation levels. The alarms associated with the area monitors provide sufficient warning of high radiation levels and/or abnormal conditions to operating personnel. The area radiation monitors do not meet the 10 CFR 50.36 screening criteria since they are not relied upon to detect and indicate in the control room significant abnormal degradation of the reactor coolant pressure boundary. Since neither the area nor the gaseous effluent monitor TS satisfy the criteria of 10 CFR 50.36, the requirements for area monitors will be relocated to the LRM and those for effluent monitors will be relocated to the ODCM. The relocation of the radiation monitors listed in Table 2 of the licensee's application is consistent with the requirements of 10 CFR 50.36 and is therefore acceptable.

CTS 3/4.4.1.4.2, "RCS LOOP ISOLATION VALVES - SHUTDOWN" (MODES 5 AND 6)

CTS 3/4.4.1.4.2 requires power to be removed from the RCS loop isolation valve operators when an RCS loop has been isolated in Modes 5 and 6. This CTS functions with two other CTSs to assure that an RCS isolation valve is not opened inadvertently. Inadvertent opening of an RCS loop isolation valve could result in a positive reactivity addition due to adding a diluted boron solution from the previously isolated RCS loop to the reactor vessel. The RCS Loop Isolation Valves - Operating CTS requires power to be removed from the RCS loop isolation valves; this is similar to CTS 3/4.4.1.4.2, only the operating CTS is for Modes 1-4. The RCS Isolated Loop - Startup CTS (3.4.1.5) requires controlling the opening of RCS isolation valves that have been isolated for more than 4 hours. The RCS Isolated Loop - Startup CTS requires verification of the boron concentration in the isolated loop prior to opening the RCS isolation valve. Since these TSs overlap, resulting in redundant TSs, CTS 3/4.4.1.4.2 does not satisfy the criteria for retention in TSs and has been identified for relocation. The Startup and Operating CTS will be retained in the CTS. This arrangement results in the content of the RCS Loop CTS being consistent with the ISTS and is therefore acceptable.

CTS 3/4.4.2, "RCS Safety Valves - Shutdown" (MODES 4 AND 5)

The licensee proposes to relocate the CTS requirements for the RCS Safety Valves - Shutdown (Modes 4 and 5) to the LRM. The pressurizer safety valves protect the RCS from being pressurized above the RCS pressure safety limit. In the CTS, the pressurizer safety valves are required to be operable in order to provide overpressure protection from operating conditions (Modes 1-3) down to the RCS temperature at which the overpressure protection system Power Operated Relief Valves are required to be operable. Therefore, the requirements of CTS 3.4.3, Safety Valves - Operating (in Modes 1-3), and CTS 3.4.9.3, Overpressure Protection System, provide continuous RCS overpressure protection. As such, the CTS 3/4.4.2, Safety Valve - Shutdown, requirement for a single pressurizer safety valve to