May 10, 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 NO. 2 - EXEMPTION FROM THE REQUIREMENTS OF 10 CFR PART 54, SECTION 54.17(c) REGARDING SCHEDULE FOR LICENSE RENEWAL APPLICATION (TAC NO. MB3634)

Dear Mr. Myers:

The Commission has approved the enclosed exemption from the specific requirements of Title 10 of the *Code of Federal Regulations* (10 CFR), Section 54.17(c), for the Beaver Valley Power Station, Unit 2. This action is in response to your letter dated December 17, 2001, that submitted the exemption request.

A copy of the exemption is enclosed. The exemption has been forwarded to the Office of the Federal Register for publication.

Sincerely,

/RA/

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

Docket No. 50-412

Enclosure: Exemption

cc w/encl: See next page

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*Memo Transmitting Staff input dtd 3/11/02. No significant changes made

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Beaver Valley Power Station, Units 1 and 2

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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION FIRSTENERGY NUCLEAR OPERATING COMPANY BEAVER VALLEY POWER STATION, UNIT NO. 2 DOCKET NO. 50-412 EXEMPTION

1.0 BACKGROUND

The FirstEnergy Nuclear Operating Company (FENOC/the licensee) is the holder of Facility Operating License No. NPF-73, which authorizes operation of Beaver Valley Power Station, Unit No. 2 (BVPS-2). The license provides, among other things, that the facility is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC, the Commission) now or hereafter in effect.

The facility consists of a pressurized-water reactor (PWR) located in Beaver County, Pennsylvania.

2.0 <u>REQUEST/ACTION</u>

Title 10 of the *Code of Federal Regulations* (10 CFR), Part 54 addresses the various requirements for renewal of operating licenses for nuclear power plants. Section 54.17(c) of Part 54 specifies:

An application for a renewed license may not be submitted to the Commission earlier than 20 years before the expiration of the operating license currently in effect.

By letter dated December 17, 2001, the licensee requested an exemption from 10 CFR 54.17(c) for BVPS-2. At the time of the request, there were more than 25 years remaining until the expiration of the current operating license for BVPS-2. The exemption

would allow FENOC to process and submit the BVPS-2 license renewal application concurrent with the Beaver Valley Power Station, Unit No. 1 (BVPS-1) license renewal application. Because of the similarities in design, operation, maintenance, operating experience and environments of the two Beaver Valley units, many of the analyses to be performed for Unit 1 would be directly applicable to Unit 2.

This exemption is required in order to allow an application for renewal of the BVPS-2 license to be prepared and submitted concurrently with the license renewal application for BVPS-1. Based on an anticipated submittal of a renewal application in September 2004, such a license renewal request for BVPS-2 would occur approximately 3 years earlier than the earliest date allowed by 10 CFR 54.17(c).

3.0 DISCUSSION

Pursuant to 10 CFR 54.15, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 54, in accordance with the provisions of 10 CFR 50.12, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present.

The requirements for exemption are discussed below:

3.1 Authorized by Law

The Commission's basis for establishing the 20-year limit contained in Section 54.17(c) is discussed in the 1991 Statements of Consideration for Part 54 (56 FR 64963). The limit was established to ensure that substantial operating experience was accumulated by a licensee before a renewal application is submitted such that any plant-specific concerns regarding aging would be disclosed. In amending the rule in 1995, the Commission indicated that it was willing to consider plant-specific exemption requests by applicants who believe that sufficient information is available to justify applying for license renewal earlier than 20 years from

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expiration of the current license. FENOC's exemption request is consistent with the Commission's intent to consider plant-specific requests and is permitted by Section 54.15 of the Commission's regulations.

The current operating license for BVPS-2, was issued in accordance with the Atomic Energy Act, as amended (AEA), and 10 CFR 50.51 which limit the duration of an operating license to a maximum of 40 years. In accordance with Section 54.31, a renewed license will be of the same class as the operating license currently in effect and cannot exceed a term of 40 years. Therefore, the term of a renewed license for BVPS-2 would be limited both by law and the Commission's regulations to 40 years. Additionally, Section 54.31 (b) states that:

A renewed license will be issued for a fixed period of time, which is the sum of the additional amount of time beyond the expiration of the operating license (not to exceed 20 years) that is requested in a renewal application plus the remaining number of years on the operating license currently in effect. The term of any renewed license may not exceed 40 years.

The potential exists that, because of FENOC's decision to apply early for license renewal for BVPS-2, FENOC might not obtain the maximum 20-year period of extended operation permitted by Section 54.31(b). Any actual reduction will depend on the date that a renewed license is issued. If a reduction in 20-year extension is required and FENOC desires further extension of the BVPS-2 operating license in the future, an additional renewal application can be submitted in accordance with Part 54.

Therefore, should the Commission determine to renew the BVPS-2 operating license, the term of the license will not exceed 40 years, and granting of FENOC's exemption request will not result in violation of the AEA or the Commission's regulations.

3.2 No Undue Risk to Public Health and Safety

FENOC's exemption request seeks only schedular relief regarding the date of submittal, and not substantive relief from the requirements of Parts 51 or 54. FENOC must still conduct all environmental reviews required by Part 51 and all safety reviews and evaluations required by Part 54 when preparing a license renewal application for BVPS-2. Following submittal, the staff's review will verify that all applicable Commission regulations are met before issuing a renewed license. Therefore, the staff finds that granting this schedular exemption will not represent an undue risk to public health and safety.

3.3 Consistent with the Common Defense and Security

As discussed previously, the exemption requested is only a schedular exemption. The NRC staff will review any renewal application for BVPS-2 submitted by FENOC, pursuant to the requested exemption, to determine whether all applicable requirements are fully met. Accordingly, granting the requested exemption is consistent with the common defense and security.

3.4 <u>Special Circumstances Supporting Issuance of the Exemption</u>

An exemption will not be granted unless special circumstances are present as defined in 10 CFR 50.12(a)(2). Specifically, Section 50.12(a)(2)(ii) states that a special circumstance exists when "application of the regulation in the particular circumstances ... is not necessary to achieve the underlying purpose of the rule." In initially promulgating Section 54.17(c) in 1991, the Commission stated that the purpose of the time limit was "to ensure that substantial operating experience is accumulated by a licensee before it submits a renewal application" (56 FR 64963). At that time, the Commission found that 20 years of operating experience provided a sufficient basis for renewal applications. However, in issuing the amended Part 54 in 1995, the Commission indicated it would consider an exemption to this requirement if sufficient information was available on a plant-specific basis to justify submission of an

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application to renew a license before completion of 20 years of operation (60 FR 22488). The 20-year limit was imposed by the Commission to ensure that sufficient operating experience was accumulated to identify any plant-specific aging concerns. As set forth below, BVPS-1 and 2 are sufficiently similar, such that the operating experience for BVPS-1 is applicable to BVPS-2. In addition, BVPS-2 has accumulated significant operating experience. Accordingly, under the requested exemption, sufficient operating experience will have been accumulated to identify any plant-specific aging concerns for both units.

The licensee states that BVPS-1 and 2 are similar in design, operation, maintenance, use of operating experience, and environments, and, as such, BVPS-1 operating experience is directly applicable to BVPS-2. Both Beaver Valley units are 2689 megawatt (thermal) PWRs designed by the Westinghouse Electric Corporation, and the same architect/engineer designed and built the entire site. The licensee states that the materials of construction for systems, structures, and components on both units are similar. These statements are supported by a review of the BVPS-2 Updated Final Safety Analysis Report (UFSAR). In particular, Section 1.3 of the UFSAR describes the similarities in design between the units. Table 1.3-1 of the UFSAR lists significant similarities between systems, structures, and components installed at both BVPS-1 and 2, including elements of the engineered safety features, containment concepts, instrumentation systems, electrical systems, and waste management system.

BVPS-2 is physically located adjacent to BVPS-1. As such, the external environments would be similar for both units. Internal environments for both units are also similar due to the similarity in plant design and operation.

FENOC also stated that many of the procedures that govern site activities are not unit specific. The Beaver Valley Plant Condition Report procedure governs the documentation, analysis, and corrective action associated with plant non-conformances and other conditions of

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concern. Non-conformance or degraded equipment on one unit is cause to investigate the possibility of the same condition on the other unit.

Because of the similarities between BVPS-1 and 2, FENOC does not divide the plant organizations by unit with the exception of the operations area, which is a unit-specific organization. The Superintendent for BVPS-1 Operations and the Superintendent for BVPS-2 Operations both report to the Plant General Manager, who reports to the Beaver Valley Senior Vice President. Additionally, various plant organizations such as Maintenance and Engineering are not divided into separate Unit 1 and Unit 2 groups, and personnel from these organizations may be assigned work activities on both units.

Given the similarities between units, the operating experience at BVPS-1 is applicable to that of BVPS-2 for purposes of the license renewal review. At the time of the exemption request, BVPS-1 had achieved over 25 years of operating experience, which are applicable to BVPS-2. Unit 2 has operated for over 14 years, which provides a substantial period of additional plant-specific operating experience to supplement the BVPS-1 operating experience. The combined years of operating experience of BVPS-1 and 2 should be sufficient to identify any aging concerns applicable to the two units.

Therefore, sufficient combined operating experience exists to satisfy the intent of Section 54.17(c), and the application of the regulation in this case is not necessary to achieve the underlying purpose of the rule. The staff finds that FENOC's request meets the requirement in Section 50.12(a)(2)(ii) that special circumstances exist to grant the exemption.

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Additionally, special circumstances

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are present. Therefore, the Commission hereby grants FENOC the exemption sought from the requirements of 10 CFR 54.17(c) for BVPS-2 based on the circumstances described herein.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this

exemption will not have a significant effect on the quality of the human environment

(67 FR 31384).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 10th day of May 2002.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation