Mr. L. W. Myers Senior Vice President FirstEnergy Nuclear Operating Company Post Office Box 4 Shippingport, Pennsylvania 15077

SUBJECT: PLANT PERFORMANCE REVIEW - BEAVER VALLEY POWER STATION

The purpose of this letter is to communicate our assessment of your performance and to inform you of our planned inspections at your facility. On February 22, 2000, we completed a Plant Performance Review (PPR) of Beaver Valley Power Station. We conduct these reviews to develop an integrated overview of the safety performance of each operating nuclear power plant. We use the results of the PPR in planning and allocating inspection resources and as inputs to our senior management meeting (SMM) process. This PPR evaluated inspection results and safety performance information for the period from January 16, 1999, through January 31, 2000, but emphasized the last six months to ensure that our assessment reflected your current performance. Our most recent summary of plant performance at Beaver Valley Power Station was provided to you in a letter dated September 30, 1999, and was discussed with you in a public meeting on December 15, 1999.

The NRC has been developing a revised reactor oversight process that will replace our existing inspection and assessment processes, including the PPR, the SMM, and the Systematic Assessment of Licensee Performance (SALP). We recently completed a pilot program for the revised reactor oversight process at nine participating sites and are making necessary adjustments based on feedback and lessons learned. We plan to begin initial implementation of the revised reactor oversight process industry-wide on April 2, 2000.

This PPR reflects continued NRC process improvements as we make the transition into the revised reactor oversight process. You will notice that the following summary of plant performance is organized differently from our previous performance summaries. Instead of characterizing our assessment results by SALP functional area, we are organizing the results into the strategic performance areas embodied in the revised reactor oversight process. In addition, we have considered the historical performance indicator data that you submitted in January 2000 in conjunction with the inspection results in assessing your performance. The results of this PPR were used to establish the inspection plan in accordance with the new risk-informed inspection program (consisting of baseline and supplemental inspections). Although this letter incorporates some terms and concepts associated with the new oversight process, it does not reflect the much broader changes in inspection and assessment that will be evident after we have fully implemented our revised reactor oversight process.

During the last six months of the assessment period, both units operated at or near full power except for a shutdown of Unit 1 and Unit 2, and a power reduction on Unit 1. Although the NRC observed some performance issues during this assessment period, we also noted that Beaver Valley Power Station continued to operate safely. In an effort to understand your response to these performance issues, additional NRC inspection resources will be allocated in certain areas as noted in this letter.

In the reactor safety strategic performance area, you made some progress in reducing the number of control room deficiencies and the backlog of corrective maintenance tasks. There were several equipment problems that challenged the operators or caused a reactor shutdown such as a main generator voltage regulator failure and degraded service water check valves.

Work control performance deficiencies associated with work package planning, pre-job walkdowns, and work coordination resulted in work delays and reduced safety related equipment availability. Preventive maintenance program deficiencies contributed to problems such as a service water check valve failure.

Although you have made some improvements in your programs for identifying and correcting problems, instances of untimely identification, incomplete safety significance assessment, and ineffective corrective actions increased the duration of some events. Actions to promptly evaluate and correct the deferral of preventive maintenance tasks, without required reviews and approvals, had not been comprehensive or timely and contributed to biofouling in the service water system and the previously noted service water check valve problems. Additionally, a degraded condition involving a deformed service water expansion joint was not promptly identified. In some cases, engineering efforts were not sufficiently thorough to prevent repeat equipment problems.

In the reactor safety strategic performance area, in addition to the baseline inspections under the new inspection program, we plan to perform two supplemental inspections focused on reviewing the effectiveness of your corrective actions for two events evaluated as low to moderate risk. The first event concerned service water biofouling, which resulted from an inadequate chemical treatment program. The second event concerned the failure to take adequate corrective actions for longstanding degraded service water check valves, which resulted in a water hammer event.

We did not identify any significant performance issues in either the radiation safety or safeguards strategic performance areas. Therefore, we currently plan to perform only our normal baseline inspections in these areas.

Enclosure 1 contains a historical listing of plant issues, referred to as the Plant Issues Matrix (PIM), that was used during this PPR process to arrive at our integrated view of your performance trends. The PIM for this assessment is grouped by the prior SALP functional areas of operations, maintenance, engineering and plant support, although the future PIM will be organized along the cornerstones of safety as described in the revised reactor oversight process. The attached PIM includes items summarized from inspection reports or other docketed correspondence regarding Beaver Valley Power Station. We did not document all aspects of licensee programs and performance that may be functioning appropriately. Rather, we only documented issues that we believe warrant management attention or represent

noteworthy aspects of performance. In addition, the PPR may also have considered some predecisional and draft material that does not appear in the attached PIM, including observations from events and inspections that had occurred since our last inspection report was issued, but had not yet received full review and consideration. We will make this material publically available as part of the normal issuance of our inspection reports and other correspondence.

Enclosure 2 lists our planned inspections for the period April 2000 through March 2001 at Beaver Valley Power Station to allow you to resolve scheduling conflicts and personnel availability in advance of our inspector arrival onsite. Since many of the inspections at Beaver Valley Power Station and at other Region 1 facilities during this period involve a team of inspectors, our ability to reschedule inspections is limited. Therefore we request you inform us as soon as possible of any scheduling conflicts. The inspection schedule for the latter half of the period is more tentative and may be adjusted in the future due to emerging performance issues at Beaver Valley Power Station or other Region 1 facilities. We also included some NRC non-inspection activities in Enclosure 2 for your information. Routine resident inspections are not listed due to their ongoing and continuous nature.

We will inform you of any changes to the inspection plan. If you have any questions, please contact me at (610)-337-5146.

Sincerely,

/RA/

John F. Rogge, Chief Reactor Projects Branch 7 Division of Reactor Projects

Docket Nos. 50-334, 50-412 License Nos. DPR-66, NPF-73

Enclosures: 1. Plant Issues Matrix

2. Inspection Plan

cc w/encls:

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