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May 30, 2003
L-03-093

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

**Subject: Beaver Valley Power Station, Unit No. 1 and No. 2
BV-1 Docket No. 50-334, License No. DPR-66
BV-2 Docket No. 50-412, License No. NPF-73
Withdrawal of Request for Regulatory Conference**

NRC Inspection Report 50-334/03-006 and 50-412/03-006 documented a preliminary White finding concerning the ability to ensure timely augmentation of the emergency response organization with 12 radiation protection technician positions. FirstEnergy Nuclear Operating Company (FENOC) withdraws its prior request (per letter L-03-080, dated May 7, 2003) for a regulatory conference to be held on this issue.

Although FENOC is withdrawing its request for a regulatory conference, additional information on the results of our investigation of this issue, including its root cause, the corrective actions that are being taken and the safety significance, is provided in Attachment 1. This information is being provided for your consideration in the final significance determination and enforcement decision of this issue.

If the NRC subsequently would prefer to have a regulatory conference to discuss the information provided within this letter, FENOC remains available to support a meeting.

Attachment 2 lists the regulatory commitments made in this submittal. If there are any questions concerning this matter, please contact Mr. Larry R. Freeland, Manager, Regulatory Affairs/Performance Improvement at 724-682-5284.

Sincerely,


L. William Pearce

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Attachments: 1. Additional Information On Preliminary Finding From NRC
Inspection Report 03-006
2. Commitments Summary

c: Mr. T. G. Colburn, NRR Senior Project Manager
Mr. D. M. Kern, NRC Sr. Resident Inspector
Mr. H. J. Miller, NRC Region I Administrator
Mr. D. A. Allard, Director BRP/DEP
Mr. L. E. Ryan (BRP/DEP)

ATTACHMENT 1

Additional Information On Preliminary Finding From NRC Inspection Report 03-006

Introduction

On January 31, 2003, FENOC self-identified that the process to provide 12 additional radiation protection (RP) technicians for staff augmentation was inadequate and documented the deficiency in its corrective action program. FENOC took immediate interim actions followed by prompt long-term actions to correct this deficiency to ensure that sufficient RP staff augmentation would be provided within 60 minutes.

The consequence of this deficiency was that the criteria for RP staff augmentation within 60 minutes was not met per the requirements of the Beaver Valley Power Station (BVPS) Emergency Plan (E-Plan). Although the previous process was not effective in meeting the current E-Plan requirement, the 60 minute time requirement for staff augmentation is self-imposed criteria that is more conservative than the 120 minute time requirement that the NRC last approved for BVPS operation in 1987 as needed to meet the 10 CFR 50.47(b)(2) planning standard.

NRC Inspection Report

NRC Inspection Report 50-334/03-006 and 50-412/03-006 identified the following:

A. Inspector Identified Findings

Cornerstone: Emergency Preparedness

- *Preliminary White. The 12 augmented radiation protection (RP) technician responders (i.e., six to respond in 30 minutes (M) and six to respond in 60 M) in the Emergency Response Organization (ERO) were not capable of meeting the minimum and timely staffing requirements in Emergency Preparedness Plan (EPP), Section 5, Table 5-1. EPP Section 5.2 states that Table 5-1 identifies the staffing requirements and capabilities for additions of the ERO. Table 5-1 requires that 12 RP technicians must respond to augment the shift crew in the four functional areas of offsite surveys (two in 30M and two in 60M), onsite surveys (one in 30M and one in 60M), in-plant surveys (one in 30M and one in 60M), and in-plant protective actions (two in 30M and two in 60M).*

This was an apparent violation of 10 CFR 50.47(b)(2) and the EPP for not ensuring that adequate and timely emergency response staffing, in the four stated functional areas, was maintained at all times. This finding was of low to

moderate safety significance because staffing augmentation processes were not capable of ensuring augmentation of the initial response staff in accordance with EPP facility activation commitments for RP technicians. (AV 50-334,412/03-006-01) (Section 1EP3)

B. Licensee Identified Violations

None

Licensee Identified Finding

FirstEnergy Nuclear Operating Company (FENOC) believes that this was a licensee-identified deficiency. As stated in NRC Inspection Report, Section 1EP3 in the Report Details, *“The inspector also reviewed documentation from recent pager tests conducted in accordance with procedure 1/2 OST-57.1, “Emergency Beeper Notification System,” and the unannounced ERO activation drill (i.e., drill which required that ERO personnel actually report to the site when called) conducted on 1/31/03, with results documented in CR 03-01078.”* Thus, this shows that the issue was first identified by FENOC during the activation drill run on January 31, 2003. Condition Report 03-01078 was written immediately following the drill with the initial conclusion that *“the preliminary cause of this event appears to be an unrealistic time requirement to call out by phone the required 12 RP techs.”* NRC Inspection Manual 0612 defines “licensee-identified” as those findings identified through a licensee program or process that are specifically intended to identify the problem. “Inspector-identified” are those findings found by NRC inspectors that the licensee had not previously documented in a corrective action program; had not been identified by a licensee-sponsored program, evaluation, or audit designed to identify deficiencies; and would not reasonably have been otherwise identified in the licensee’s normal processes or reviews.

The Corrective Action Program requires the review of an identified deficiency and its corrective action timeliness be based upon the safety significance of the issue. For this issue, interim compensatory measures were promptly taken to ensure that the criteria identified in BVPS EPP Table 5-1 for the RP functions would be met in the required time frame for any future call-out until more permanent corrective actions could be implemented. Given that the inadequate RP technician call-out process was identified by FENOC with corrective actions implemented commensurate with its safety significance, this should be listed as a licensee-identified finding.

Chronology of BVPS EPP Table 5-1 Staff Augmentation Time Response

The following information is provided to achieve a common understanding of the history related to Beaver Valley Power Station Emergency Response staff augmentation:

- 1980 BVPS Emergency Plan (E-Plan) Table 5-1 listed a maximum staff augmentation response time threshold of 60 minutes which included the RP technicians.
- 1981 BVPS E-Plan Table 5-1 revised by Duquesne Light Company to establish a maximum response time threshold of 120 minutes due to difficulty in meeting the 60 minute criteria.
- 1982 In response to an NRC inspection required action, BVPS E-Plan Table 5-1 revised back to 60 minutes from 120 minutes for the maximum response time.
- 1985 A BVPS E-Plan was developed to address the future operation of BVPS Unit 2 which included staff augmentation times of 120 minutes for Table 5-1 positions due to difficulties in meeting a 60 minute criteria.
- 1985 NRC Safety Evaluation Report approves staff augmentation times of 120 minutes as meeting the planning standard for 10 CFR 50.47(b)(2) for draft E-Plan addressing both BVPS Units' operation (NUREG-1057).
- 1987 BVPS E-Plan (which included both BVPS Units) revised when BVPS Unit 2 received operating license. This included staff augmentation times of 120 minutes for EPP Table 5-1 positions.
- 1995 In NRC Inspection 95-01 at BVPS, NRC noted that the E-Plan allowed staff augmentation within 120 minutes, which did not conform to NUREG-0654 criteria of within 60 minutes. NRC opens Inspector Follow Item (IFI), but notes "no safety concern exists" since the licensee follows it in practice.
- 1995 In response to the NRC IFI, BVPS E-Plan voluntarily revised to replace the 120 minute criteria with a more conservative 60 minute staff augmentation time frame for Table 5.1-1 positions.
- 2003 An unannounced EP activation drill identifies that method to call out RP technicians is not adequate to meet 60 minutes response time. Other E-Plan positions filled within E-Plan response time requirements. Compensatory measures taken to ensure that 60 minute criteria for RP technicians will be met in future call-outs.

Safety Significance

FENOC's evaluation of the safety significance concluded the following:

1. The method of ensuring staff augmentation for RP technicians was inadequate to meet the current E-Plan time commitment.

2. The Planning Standard function remained even though a noncompliance existed.

A process to augment on-site staff with additional RP technicians was in place. This was demonstrated during the January 31, 2003 call-out drill, although this drill showed a deficiency in the process for having RP technicians arrive within the time required by the E-Plan.

All past actual BVPS events causing call-out of RP technicians indicated no problem with staff augmentation. The two actual ALERTs experienced at BVPS (January 28, 1988 and August 30, 1990) did not indicate any deficiencies or problems with staff augmentation.

RP technicians have been shown to be reliable and motivated to respond when contacted. Some RP technicians responded promptly through their own communication prior to being formally called out during the prior BVPS Alert events. The recent drill which identified the less than adequate call-out process method also demonstrated staff augmentation was completed within 95 minutes, with the last of the 12 RP technicians arriving within 40 minutes of being initially contacted.

The continuous on-site BVPS staff is trained to handle emergency response actions until it can be augmented by non-shift personnel. By the current BVPS E-Plan criteria, the on-site personnel must be capable of performing all necessary actions for the first 60 minutes (this includes both normal and off-normal work week hours). It is FENOC's position that the on-site staff is also capable of temporarily addressing any required short-term actions if the staff augmentation of RP technicians were somehow delayed for up to an additional 60 minutes during non-normal work week hours as described in previous communication. The staff augmentation for RP technicians would have been met within E-Plan Table 5-1 requirements during normal work week hours.

The time frame required to complete staff augmentation is not explicitly specified by 10 CFR 50.47. Staff augmentation time of 120 minutes for these EP positions was previously NRC-approved for BVPS as meeting the 10 CFR 50.47 during the review of the Unit 2 operating license (NRC BVPS Unit 2 SER, NUREG-1057, 1985, Section 13.3.2.2). Thus, the NRC previously approved a 120 minute response time for BVPS staff augmentation as meeting the 10 CFR 50.47(b)(2) Planning Standard at BVPS. The January 31, 2003 drill identified that the process was inadequate to meet the current more conservative BVPS E-Plan staff augmentation time commitment of 60 minutes for RP technicians. The January 31, 2003 drill also identified that the process to augment the BVPS staff with RP technicians could occur within 120 minutes. The 95 minutes response time was within the criteria which the NRC previously approved as meeting the 10 CFR 50.47(b)(2) Planning Standard. Thus, FENOC concludes that the previous method used for RP technician call-out to augment the on-site staff was a failure to

comply with the requirements of the current BVPS E-Plan. However, it was not a loss of the 10 CFR 50.47(b)(2) planning standard function since it has been previously shown and approved by the NRC that the planning standard for 10 CFR 50.47(b)(2) could be met by staff augmentation within 120 minutes. 120 minutes for staff augmentation during off-hours has been similarly approved by the NRC as acceptable for other stations as well (e.g., Palo Verde). BVPS voluntarily revising their E-Plan staff augmentation time response criteria to a lessor, more conservative requirement would not alter a previous NRC-approved licensing bases conclusion that this planning standard can be met at BVPS with a 120 minute time response.

Given the on-shift's staff training to address emergency response actions until augmented by non-shift personnel, the ability to augment within 120 minutes but not within 60 minutes did not adversely affect BVPS ability to protect the health and safety of the public.

With regard to significance determination pursuant to NRC Inspection Manual 0609, a White finding would be a finding of low to moderate safety significance which would be a loss of a planning standard function for 10 CFR 50.47(b)(2). Given the criteria for significance determination pursuant to NRC Inspection Manual 0609 and the information described above, FENOC concludes this self-identified deficiency does not meet the criteria for a white finding.

Cause Analysis and Corrective Actions

Beaver Valley Senior Management recognizes the importance of meeting the current BVPS E-Plan requirements for staff augmentation. This issue was self-identified, initial interim compensatory measures were quickly put in place, and more permanent corrective actions have been implemented. These corrective actions were commensurate with the safety significance of the issue.

FENOC's evaluation of this deficiency concluded the following root cause:

The process to notify RP technicians was fundamentally different from the other one-hour emergency responders and was not adequate to ensure 12 RP technicians would be available within 60 minutes as required by BVPS Emergency Plan Table 5-1 (i.e., program/process weakness).

A contributing cause was that the method of calling out RP technicians was not formalized, thereby missing an opportunity to detect the problem during procedure reviews. Another contributing cause was that the call-out process for RP technicians was not tested during prior unannounced activation drills, thereby missing opportunities to identify this problem sooner.

Initial interim action was implemented shortly after the deficiency was identified. This involved assigning various radiation protection-knowledgeable management personnel who already carried Emergency Response Organization (ERO) pagers to respond to any ERO call-out in order to fulfill the E-Plan Table 5-1 RP technician functions until they would be relieved by the normal RP technicians via the past method of manual call-out. This would apply for any emergency call-out until other more permanent corrective actions could be implemented. Permanent corrective actions have now been made to notify the RP technicians by the same method as other ERO staff augmentation responders – by pager notification and training to respond to that pager notification of ERO call-out. Pagers and cell phones were provided to a pool of RP technicians (33), all of which would be simultaneously notified if an emergency event occurred and staff augmentation was needed. The RP technicians will now call in to the Beaver Valley Emergency Response System (BVERS) and respond accordingly until all 12 RP positions are filled. This is a similar process as used to fill other BVPS ERO positions, which has been previously demonstrated to be effective at meeting the 60 minute staff augmentation response time requirements. These RP technicians have been trained on the actions necessary to respond to a pager notification for ERO call-out.

Additional corrective actions involve performing additional unannounced EP activation drills to demonstrate that the required number of RP technicians arrive within the E-Plan Table 5-1 time requirement of 60 minutes. The criteria for unannounced activation drills has been revised to preclude excluding any group on E-Plan Table 5-1 without site vice-president specific approval. An evaluation of the implementation of other EP planning standards will be performed. An effectiveness review of corrective actions taken to address this issue is also scheduled to be completed. Completion of these items is being tracked through the Corrective Action Program.

Summary

BVPS identified that the previous process failed to provide an adequate method to meet the current E-Plan Table 5-1 time requirement of 60 minutes for RP technician staff augmentation. This discrepancy was self-identified on January 31, 2003. Corrective actions were promptly implemented to address this deficiency by initial temporary actions followed by more permanent actions to make the RP call-out process similar to other ERO responders. Although the prior process for manually calling out RP technicians was not satisfactory to ensure that the more conservative BVPS E-Plan staff augmentation time response requirement was met, it was shown to meet the 10 CFR 50.47(b)(2) planning standard minimum required time frame of 120 minutes previously approved by the NRC for BVPS and would not have adversely affected the BVPS staff's ability to protect the health and safety of the public.

ATTACHMENT 2

Commitment Summary

The following list identifies those actions committed to by FirstEnergy Nuclear Operating Company (FENOC) for Beaver Valley Power Station (BVPS) Unit Nos. 1 and 2 in this document. Any other actions discussed in the submittal represent intended or planned actions by Beaver Valley. These other actions are described only as information and are not regulatory commitments. Please notify Mr. Larry R. Freeland, Manager, Regulatory Affairs/Performance Improvement, at Beaver Valley on (724) 682-5284 of any questions regarding this document or associated regulatory commitments.

| <u>Commitment</u> | <u>Due Date</u> |
|---|---|
| Performing additional unannounced EP activation drills to demonstrate that the required number of RP technicians arrive within the E-Plan Table 5-1 time requirement of 60 minutes. | As tracked through the Corrective Action Program. |
| Perform an evaluation of the implementation of other EP planning standards | As tracked through the Corrective Action Program. |
| Complete an effectiveness review of corrective actions taken to address this issue | As tracked through the Corrective Action Program. |