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

**Subject: Beaver Valley Power Station, Unit No. 1**  
**Docket No. 50-334, License No. DPR-66**  
**License Amendment Request No. 284, Supplemental Information**

On July 21, 2000, pursuant to 10 CFR 50.90, FirstEnergy Nuclear Operating Company submitted License Amendment Request No. 284 to the NRC for review. The proposed Technical Specification change would modify Technical Specification 3.4.8 by reducing the Beaver Valley Power Station (BVPS) Unit No. 1 Reactor Coolant System (RCS) specific activity limit.

As requested by the NRC Project Manager for BVPS, a revised No Significant Hazards Evaluation for this license amendment request is provided in Attachment A. The No Significant Hazards Evaluation has been revised to include additional information which was discussed in the license amendment submittal, but not within the previous No Significant Hazards Evaluation section.

If you have any questions regarding this matter, please contact Mr. Thomas S. Cosgrove, Manager, Licensing at 724-682-5203.

Sincerely,



Lew W. Myers

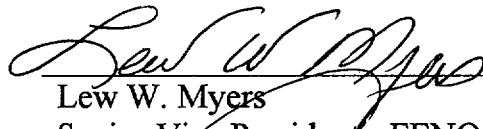
- c: Mr. L. J. Burkhart, Project Manager  
Mr. D. M. Kern, Sr. Resident Inspector  
Mr. H. J. Miller, NRC Region I Administrator  
Mr. D. A. Allard, Director BRP/DEP  
Mr. L. E. Ryan (BRP/DEP)

A001

**Subject: Beaver Valley Power Station, Unit No. 1  
BV-1 Docket No. 50-334, License No. DPR-66  
License Amendment Request No. 284, Supplemental Information**

I, Lew W. Myers, being duly sworn, state that I am Senior Vice President of FirstEnergy Nuclear Operating Company (FENOC), that I am authorized to sign and file this submittal with the Nuclear Regulatory Commission on behalf of FENOC, and that the statements made and the matters set forth herein pertaining to FENOC are true and correct to the best of my knowledge and belief.

FirstEnergy Nuclear Operating Company

  
Lew W. Myers  
Senior Vice President - FENOC

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF BEAVER

Subscribed and sworn to me, a Notary Public, in and for the County and State above named, this 13th day of December 2000.

  
My Commission Expires:

Notarial Seal  
Sheila M. Fattore, Notary Public  
Shippingport Boro, Beaver County  
My Commission Expires Sept. 30, 2002  
Member, Pennsylvania Association of Notaries

## ATTACHMENT A

### Beaver Valley Power Station, Unit No. 1 License Amendment Request No. 284, Supplemental Information REVISION OF RCS SPECIFIC ACTIVITY VALUE

#### A. NO SIGNIFICANT HAZARDS EVALUATION

The proposed license amendment would reduce the limit for Reactor Coolant System (RCS) specific activity in Beaver Valley Power Station (BVPS) Unit No. 1 Technical Specification 3/4.4.8. The Dose Equivalent I-131 is requested to be lowered from the current value of  $\leq 0.35 \mu\text{Ci}/\text{gram}$  to a value of  $\leq 0.20 \mu\text{Ci}/\text{gram}$  as specified in Technical Specification 3.4.8.a (and associated Actions and Table 4.4-12). This change will also lower the 'Acceptable Operation' line on Figure 3.4-1 from  $21 \mu\text{Ci}/\text{gram}$  to  $12 \mu\text{Ci}/\text{gram}$  Dose Equivalent I-131 for 80-100% power, and a commensurate reduction for power between 20-80%.

In conjunction with the reduced Technical Specification limit for RCS specific activity, the BVPS Unit 1 control room and offsite doses have been reanalyzed to allow for higher primary-to-secondary leakage in accordance with methodology described in NRC Generic Letter (GL) 95-05, "Voltage-Based Repair Criteria for Westinghouse Steam Generator Tubes by Outside Diameter Stress Corrosion Cracking," and as previously approved in BVPS Unit 1 License Amendment No. 205. To allow for maximum primary-to-secondary leakage, the resultant control room thyroid dose values listed in the UFSAR for Main Steam Line Break will increase slightly from 29 REM to 30 REM. This increase in calculated dose warrants NRC review and approval.

The no significant hazard considerations involved with the proposed amendment have been evaluated. The evaluation focused on the three standards set forth in 10 CFR 50.92(c), as quoted below:

The Commission may make a final determination, pursuant to the procedures in paragraph 50.91, that a proposed amendment to an operating license for a facility licensed under paragraph 50.21(b) or paragraph 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or

- (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- (3) Involve a significant reduction in a margin of safety.

The following evaluation is provided for the no significant hazards consideration standards.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change, which lowers the Technical Specification limit for Dose Equivalent I-131, is conservative and will not adversely affect the current calculated dose values for BVPS Unit 1 Design Basis Accidents (DBAs) since a lower RCS specific activity will lower the calculated dose from any resultant steam generator tube leakage postulated during the DBA. The Standard Review Plan assumption for accident-induced steam generator tube leakage spike remains valid. Thus, the dose listed in the BVPS Unit 1 UFSAR from those DBAs which calculate and list a dose value in the BVPS Unit 1 UFSAR will remain bounding values, except for the Main Steam Line Break (MSLB) DBA.

The immediate effect upon receiving a revised lower primary coolant specific activity limit in Technical Specification 3.4.8.a would also result in a lower calculated MSLB dose value, if incorporated into the MSLB dose calculation without any other modifications. But the BVPS Unit 1 MSLB analysis is analyzed per GL 95-05 which states that a reduction on RCS iodine activity is an acceptable means for accepting higher projected leakage rates and still meeting the applicable limits of Title 10 of the Code of Federal Regulations Part 100 and GDC 19 utilizing currently accepted licensing basis assumptions. Thus, pursuant to this GL 95-05 methodology, the reduced RCS specific activity limit for Technical Specification 3.4.8.a will be used to allow for higher projected leakage rates, while still meeting the applicable regulatory dose limits.

Thus, the current BVPS Unit 1 MSLB calculated dose value will not decrease with a new lower RCS specific activity value in order to allow for a

higher projected leakage rates. However, the BVPS Unit 1 MSLB calculated dose values will remain within the limits specified in 10 CFR 50, Appendix A, GDC 19, and the radiological doses to the public will remain a small fraction of the regulatory limits specified in 10 CFR 100.11, using methodology previously accepted in BVPS Unit 1 License Amendment No. 205.

Therefore, this proposed change will not increase the probability of occurrence of a postulated accident or will not significantly increase the consequences of an accident previously evaluated since the change would continue to comply with the current BVPS Unit 1 and Unit 2 licensing basis as it relates to the dose limits of GDC 19 and 10 CFR Part 100.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed license amendment to the primary coolant specific activity limit does not change the way the RCS is operated. The proposed changes only involve changes to the primary coolant specific activity limit where continued power operation may occur. This reduced limit is conservative and does not alter the RCS or steam generators' ability to perform their design bases.

GL 95-05 states that any reduction of RCS specific activity less than 0.35  $\mu\text{Ci}/\text{gram}$  Dose Equivalent I-131 requires an evaluation of release rate data. This evaluation shows that BVPS Unit 1 RCS Dose Equivalent I-131 data fully supports lowering the Technical Specification RCS specific activity limit to 0.20  $\mu\text{Ci}/\text{gram}$  without compromising the Standard Review Plan assumption of a post-event iodine spike factor of 500.

Therefore, this proposed change does not create the possibility of a new or different kind of accident from any previously evaluated accident since the RCS and steam generator will continue to operate in accordance with their design bases.

3. Does the change involve a significant reduction in a margin of safety?

The proposed amendment does not involve revisions to any safety limits or safety system setting that would adversely impact plant safety. The proposed amendment does not adversely affect the ability of systems, structures or components important to the mitigation and control of design bases accident conditions within the facility. In addition, the proposed amendment does not affect the ability of safety systems to ensure that the facility can be maintained in a shutdown or refueling condition for extended periods of time.

The proposed license amendment to the primary coolant specific activity limit does not adversely change the way the RCS or steam generators are operated. This modification does not alter these systems' ability to perform their design bases. The existing safety analyses remain bounding. Therefore, the margin of safety is not significantly reduced.

B. NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the considerations expressed above, it is concluded that the activities associated with this license amendment request satisfy the requirements of 10 CFR 50.92(c) and, accordingly, a no significant hazards consideration finding is justified.