

August 17, 2001

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

SUBJECT: ENVIRONMENTAL ASSESSMENT FOR BEAVER VALLEY POWER STATION,  
UNIT NOS. 1 AND 2 (BVPS-1 AND 2) - TAC NOS. MB1492 AND MB1493

Dear Mr. Myers:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for amendment dated March 19, 2001, as supplemented by letters dated July 6, and August 8, 2001. The proposed amendments would revise the BVPS-1 and 2 Updated Final Safety Analysis Report assumptions, descriptions, and calculated radiological consequences of a postulated fuel handling accident (FHA). These revisions would demonstrate that the consequences of an FHA, once the fuel has undergone radioactive decay for 100 hours, would result in calculated radiation exposures within the guidelines of Title 10 of the *Code of Federal Regulations*, Section 50.67, "Accident Source Term." Consistent with the assumptions and descriptions of the revised FHA analyses, the licensee proposes to revise the BVPS-1 and 2 Technical Specifications (TSs) associated with requirements for handling irradiated fuel assemblies in the reactor containment and fuel building. The proposed amendment would also revise the TSs associated with ensuring that safety analysis assumptions for a postulated FHA are met.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

/RA/

Lawrence J. Burkhart, 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: Environmental Assessment

cc w/encl: See next page

UNITED STATES NUCLEAR REGULATORY COMMISSIONFIRSTENERGY NUCLEAR OPERATING COMPANYOHIO EDISON COMPANYPENNSYLVANIA POWER COMPANYDOCKET NOS. 50-334 AND 50-412BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 (BVPS-1 AND 2)ENVIRONMENTAL ASSESSMENT AND FINDING OFNO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission is considering issuance of an amendment to Technical Specifications (TSs) for Facility Operating License Nos. DPR-66 and NPF-73, issued to FirstEnergy Nuclear Operating Company, et al. (the licensee), for operation of BVPS-1 and 2, located in Shippingport, Pennsylvania. Therefore, as required by Title 10 of the *Code of Federal Regulations* (10 CFR), Section 51.21, the NRC is issuing this environmental assessment and finding of no significant impact.

ENVIRONMENTAL ASSESSMENTIdentification of the Proposed Action:

The proposed amendments would revise the BVPS-1 and 2 Updated Final Safety Analysis Report assumptions, descriptions, and calculated radiological consequences of a postulated fuel handling accident (FHA), including implementation of a revised accident source term for a postulated FHA. These revisions would demonstrate that the consequences of an FHA, once the fuel has undergone radioactive decay for 100 hours, would result in calculated radiation exposures within the guidelines of 10 CFR 50.67, "Accident Source Term." Consistent with the assumptions and description of the revised FHA analysis, the licensee proposes to revise the BVPS-1 and 2 TSs associated with the requirements for handling irradiated fuel

assemblies in the reactor containment and fuel building. The proposed amendment would also revise the TSs associated with ensuring that safety analysis assumptions for a postulated FHA are met. The term “recently irradiated” fuel would be defined in the applicable TS Bases as “fuel that has occupied part of a critical reactor core within the previous 100 hours” and the term “recently irradiated” fuel would be added in various locations throughout the TSs. The purpose of the addition of the term “recently irradiated” throughout the TSs is to establish a point where operability of those systems typically used to mitigate the consequences of an FHA is no longer required to meet the radiation exposure limits of 10 CFR 50.67. This amendment would revise the TSs to eliminate TS controls over the integrity of the fuel building and the reactor containment building and the operability of the associated building’s ventilation/filtration systems after the decay period of 100 hours.

The proposed action is in accordance with the licensee’s application dated March 19, 2001 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML010810433), as supplemented by letters dated July 6 (ADAMS Accession No. ML011980423), and August 8 (ADAMS Accession No. ML012260302), 2001.

The Need for the Proposed Action:

The proposed action involves an accepted method for implementation of a revised accident source term for postulated design basis accident analyses (such as the FHA) in accordance with 10 CFR 50.67. The proposed action would result in a reduction in an unnecessary regulatory burden and would result in greater flexibility in execution of refueling outage operations.

Environmental Impacts of the Proposed Action:

The NRC has completed its evaluation of the proposed action and concludes that the revised assumptions, descriptions, and methodologies used by the licensee for a postulated FHA for BVPS-1 and 2 follow regulatory guidance and that there is reasonable assurance that,

in the event of a postulated FHA, the offsite and control room doses would be well within the 10 CFR 50.67 guidelines.

The proposed action will not significantly increase the probability or consequences of accidents, no changes are being made in the types of effluents that may be released off site, and there is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action does not have a potential to affect any historic sites. It does not affect nonradiological plant effluents and has no other environmental impact. Therefore, there are no significant nonradiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

Environmental Impacts of the Alternatives to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the “no-action” alternative). Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

The action does not involve the use of any different resource than those previously considered in the Final Environmental Statements for BVPS-1 and 2, dated July 31, 1973, and September 30, 1985, respectively (Nuclear Documents Systems Accession Nos. 8907200125 and 8509300559, respectively).

Agencies and Persons Consulted:

On August 9, 2001, the NRC staff consulted with the Pennsylvania State official, Mr. Larry Ryan of the Pennsylvania Department of Environmental Protection, Bureau of

Radiation Protection, regarding the environmental impact of the proposed action. The State official had no comments.

#### FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

Further details with respect to the proposed action may be found in the licensee's letter dated March 19, 2001, as supplemented by letters dated July 6, and August 8, 2001.

Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland.

Publically available records will be accessible electronically from the ADAMS Public Library component on the NRC Web site, <http://www.nrc.gov> (the Public Electronic Reading Room).

Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR Reference staff by telephone at 1-800-397-4209, or 301-415-4737, or by e-mail at [pdr@nrc.gov](mailto:pdr@nrc.gov).

Dated at Rockville, Maryland, this 17th day of August 2001.

FOR THE NUCLEAR REGULATORY COMMISSION

**/RA/**

Lawrence J. Burkhart, Project Manager, Section 1  
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Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

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Lawrence J. Burkhart, Project Manager, Section 1  
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Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosure: Environmental Assessment

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