



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 28, 2011

Mr. Michael J. Pacilio
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3:
SUPPLEMENTAL INFORMATION NEEDED FOR ACCEPTANCE OF
REQUESTED LICENSING ACTION RE: RELIEF REQUEST I4R-51
(TAC NOS. ME5392 AND ME5393)

Dear Mr. Pacilio:

By letter to the Nuclear Regulatory Commission (NRC) dated January 24, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML110250132), Exelon Generation Company, LLC, (Exelon) submitted Relief Request I4R-51. The relief request would provide relief from reactor vessel circumferential weld examinations as currently required by the American Society of Mechanical Engineers (ASME) Code, Table IWB-2500-1 through the end of the extended license period for the Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. The purpose of this letter is to provide the results of the NRC staff's acceptance review of this relief request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

Pursuant to Sections 50.55a(a)(3)(i) and 50.55a(a)(3)(ii) of Title 10 of the *Code of Federal Regulations* (10 CFR), the applicant shall demonstrate that the proposed alternatives would provide an acceptable level of quality and safety, or that compliance with the specified requirements of Section 50.55a would result in hardship or unusual difficulty without a compensating increase in the level of quality or safety. The NRC staff has reviewed your application and concluded that additional information is necessary to enable the NRC staff to make an independent assessment regarding the acceptability of the proposed amendment request in terms of regulatory requirements and the protection of public health and safety and the environment.

Regulatory Guide (RG) 1.190, "Calculational and Dosimetry Methods For Determining Pressure Vessel Neutron Fluence," March 2001 (ADAMS Accession No. ML010890301), describes acceptable attributes of a neutron fluence calculation. Relief Request I4R-51 is based on a calculated neutron fluence value; however, the request did not provide sufficient information for the staff to perform an independent assessment to determine whether the reactor vessel (and weld surface) neutron fluence was calculated in accordance with RG 1.190, or in some other acceptable fashion.

In order to accept the relief request for detailed NRC staff review, the staff requires that the licensee confirm that the fluence values contained in its submittal letter were calculated in a manner consistent with RG 1.190 or some other acceptable manner. The NRC staff notes that the PBAPS license renewal safety evaluation report, NUREG-1769, Section 4.2.1.2, "Staff Evaluation" (ADAMS Accession No. ML031010127), indicates that Peach Bottom had not performed fluence calculations through the end of the extended license period, but that such calculations would be performed once the General Electric (GE) fluence calculation methodology described in GE report NEDC-32983P, "General Electric Methodology for Reactor Pressure Vessel Fast Neutron Flux Evaluation," had been approved. NEDC-32983P-A, Revision 2 (ADAMS Accession Nos. ML072480116 and ML072480121), has now been approved by the NRC staff. If the fluence values were not calculated using NEDC-32983P-A, Revision 2, then the NRC staff would also request that the licensee describe the fluence calculation method that was used and provide information concerning the qualification of the method for use on the BWR/4 vessel geometry in sufficient detail to determine whether the calculations were adherent to RG 1.190 guidance or some other acceptable methodology.

In order to make the application complete, the NRC staff requests that Exelon supplement the application to address the information requested above by March 17, 2011. This will enable the NRC staff to complete its detailed technical review. If the information responsive to the NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC staff will cease its review activities associated with the application. If the application is subsequently accepted for review, you will be advised of any further information needed to support the NRC staff's detailed technical review by separate correspondence.

The information requested and associated time frame in this letter was discussed with Mr. Tom Loomis of your staff on February 28, 2011.

If you have any questions, please contact me at (301) 415-3204.

Sincerely,



John D. Hughey, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-277 and 50-278

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ADAMS Accession No. ML110590063

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