



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

April 5, 1990

Docket Nos. 50-317  
and 50-318

Mr. G. C. Creel  
Vice President - Nuclear Energy  
Baltimore Gas and Electric Company  
Calvert Cliffs Nuclear Power Plant  
MD Rts 2 & 4  
P. O. Box 1535  
Lusby, Maryland 20657

Dear Mr. Creel:

SUBJECT: RESPONSE TO NRC BULLETIN 89-03 "POTENTIAL LOSS OF REQUIRED SHUTDOWN  
MARGIN DURING REFUELING OPERATIONS" - CALVERT CLIFFS, UNIT NOS. 1 AND 2

REFERENCE: TAC Numbers 75411 (Unit 1) and 75412 (Unit 2)

On November 21, 1989, the NRC staff issued Bulletin 89-03 "Potential Loss of Required Shutdown Margin During Refueling Operations." The bulletin requested that all PWR licensees and PWR construction permit holders take the actions described in the bulletin to ensure that an adequate shutdown margin is maintained during all refueling operations. To accomplish this, three actions were described:

1. Assure that any intermediate fuel assembly configuration (including control rods) intended to be used during refueling is identified and evaluated to maintain sufficient refueling boron concentration to result in a minimum shutdown margin of approximately 5%.
2. Assure that fuel loading procedures only allow those intermediate fuel assembly configurations that do not violate the allowable shutdown margin and that these procedures are strictly adhered to.
3. Assure that the staff responsible for refueling operations is trained in the procedures recommended in Item 2 above and understand the potential consequences of violating these procedures. This training should include the fundamental aspects of criticality control with enriched fuel assemblies.

By letter dated January 16, 1990, you respond to the subject bulletin. You noted that the issuance of the bulletin was the result of a 10 CFR Part 21 notification submitted by Baltimore Gas and Electric Company. You further indicated that programs are in place to address the three actions described above.

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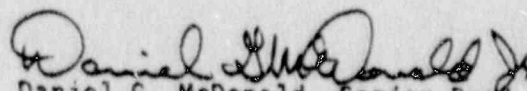
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Mr. G. C. Creel

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We consider your response to be satisfactory and are closing the above referenced TAC numbers.

Sincerely,

A handwritten signature in dark ink, appearing to read "Daniel G. McDonald". The signature is fluid and cursive, with a large initial "D" and "M".

Daniel G. McDonald, Senior Project Manager  
Project Directorate I-1  
Division of Reactor Projects - 1/11  
Office of Nuclear Reactor Regulation

cc: See next page

Mr. G. C. Creel  
Baltimore Gas & Electric Company

Calvert Cliffs Nuclear Power Plant

cc:

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Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, Pennsylvania 19406



Mr. G. C. Creel

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We consider your response to be satisfactory and are closing the above referenced TAC numbers.

Sincerely,

ORIGINAL SIGNED BY:

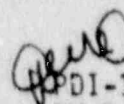
Daniel G. McDonald, Senior Project Manager  
Project Directorate 1-1  
Division of Reactor Projects - 1/11  
Office of Nuclear Reactor Regulation

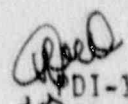
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