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July 31, 2003

Our File: 108US-013210-021-001  
Your File: Project No. 722

U.S. Nuclear Regulatory Commission,  
Document Control Desk,  
Washington, D.C. 20555

Attention: Ms. B. Sosa  
Project Manager, ACR

Reference: 1. Letter V. Langman to B. Sosa, "Further to the ACR Pre-Application Plan – Detailed Deliverables and Schedule for Focus Topics", December 18, 2002.  
2. Letter V. Langman to B. Sosa, "Phase 2 of ACR Pre-Application Review", July 30, 2003.

Re: Safety Basis for ACR

In support of the NRC's pre-application review of the ACR, in particular focus topic # 2 (Design Basis Accidents and Acceptance Criteria) of attachment 1 to Reference 1, and as committed in Reference 2, please find enclosed a CD copy containing the AECL Report 108-03600-AB-003 Revision 0, "Safety Basis for ACR".

The enclosed describes the ACR approach to the definition and classification of the events analysed in the ACR safety analysis. Acceptance criteria are provided for each class of events along with examples of analysis assumptions and methodologies.

Within AECL's document system this report is at the top of a hierarchy of analysis basis (AB) documents. The report provides an overview of the ACR safety analysis philosophy. Next in the hierarchy is the Safety Analysis Initial Conditions and Standard Assumptions document which will also be submitted to the NRC on August 15, 2003. That document presents the acceptance criteria, trips and system assumptions used in safety analysis. In addition, each safety analysis report has its own analysis basis document that describes, in detail, the acceptance criteria, assumptions and methodologies used for the particular analysis. The event-specific analysis basis documents will be consistent with the information contained in this enclosed safety basis report.

We request NRC feedback on the acceptability of the approach outlined in the enclosed report by October 31, 2003, or earlier if possible.

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If you have any questions on this letter and/or the enclosed information please contact the undersigned at (905) 823-9060 extension 6543.

Yours sincerely,

A handwritten signature in cursive script that reads 'Vince Lang' followed by a horizontal line.

Vince J. Langman  
ACR Licensing Manager

/Enclosures:

1. A CD containing the AECL Report 108-03600-AB-003, Revision 0, "Safety Basis for ACR", July 2003.