



September 1, 1995

Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Document Control Desk

Subject: Independent Verification of Byron/Braidwood D4
Steam Generator Tube Support Plate Differential
Pressures During Main Steam Line Break
NRC Docket Numbers:50-454 and 50-456

Reference: Commonwealth Edison Company Meeting with
the Nuclear Regulatory Commission
dated August 17, 1995

The Reference meeting was held between the Nuclear Regulatory Commission (NRC) and the Commonwealth Edison Company (ComEd) to discuss ComEd's proposed Technical Specification Amendment pertaining to Byron and Braidwood applications for a 3 Volt Interim Plugging Criteria (IPC). At that meeting, the Staff and ComEd briefly discuss the viability of ComEd submitting an independent verification of the steam generator hydrodynamic load model during main steam line break (MSLB) conditions. The attached, "Independent Verification of Byron/Braidwood D4 Steam Generator Tube Support Plate Differential Pressures during Main Steam Line Break," is submitted to support that request.

This document contains a methodology to determine the peak loads on the upper tube support plate that would result from a design basis MSLB event. This methodology is based solely on first principles and has no reliance on computer codes. The results obtained compare favorably with those obtained via computer simulation, and provide a basis to assess the margin of safety utilized in the analyses of tube support plate (TSP) loads. It can be concluded that the factor of two used in the analyses of TSP loads. It can be concluded that the factor of two used in the structural assessment results in a physically bounding pressure drop, even allowing for typical uncertainties in two phase pressure drop prediction.

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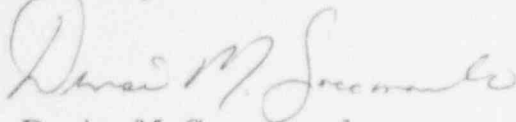
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If you have any questions, please contact this office.

Sincerely,



Denise M. Saccomando
Nuclear Licensing Administrator

Attachment

cc: D. Lynch, Senior Project Manager-NRR
R. Assa, Braidwood Project Manager-NRR
G. Dick, Byron Project Manager-NRR
S. Ray, Senior Resident Inspector-Braidwood
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