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Subject: Response to NRC's Request for Sensitivity Studies Regarding Appendix A of Topical Report (TR) WCAP-16608-P, "Westinghouse Containment Analysis Methodology" (TAC No. MD2953) (Non-proprietary)

Enclosed are copies of the Non-Proprietary responses to NRC's Request for Sensitivity Studies Regarding Appendix A of Topical Report (TR) WCAP-16608-P, "Westinghouse Containment Analysis Methodology."

This submittal does not contain proprietary information and may be placed in the public domain.

Very truly yours,

J. A. Gresham, Manager
Regulatory Compliance and Plant Licensing

Enclosures
cc: A. Mendiola, NRR
R. Lobel, NRR
J. Thompson, NRR

T007

Addl copies have been sent to the PM

NRR

Response to NRC's Request for Sensitivity Studies Regarding Appendix A of Topical Report (TR) WCAP-16608-P, "Westinghouse Containment Analysis Methodology" (TAC No. MD2953) (Non-Proprietary)

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As part of their acceptance review for WCAP-16608, Appendix A, the NRC asked Westinghouse to determine the sensitivity to the condensation heat and mass transfer option with the generic GOTHIC BWR Mark I containment model. The sensitivity cases were run using the RSLB peak pressure and ECCS minimum backpressure models. The condensation heat and mass transfer option in each model was changed from DLM to DLM-FM for the sensitivity case.

Plots comparing the containment pressure, temperature, and suppression pool temperature responses with the two options are contained in the following pages. The model results are not very sensitive to the condensation heat and mass transfer option. We use the DLM option since it had been previously accepted by the NRC for PWR containment analyses.

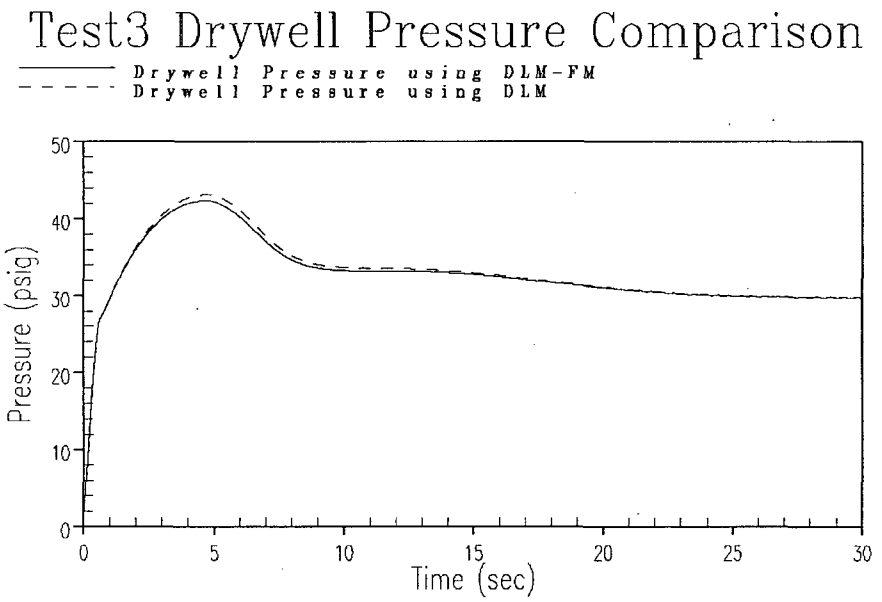

Figure 1: RSLB Peak Pressure Case Comparison (Drywell Pressure)

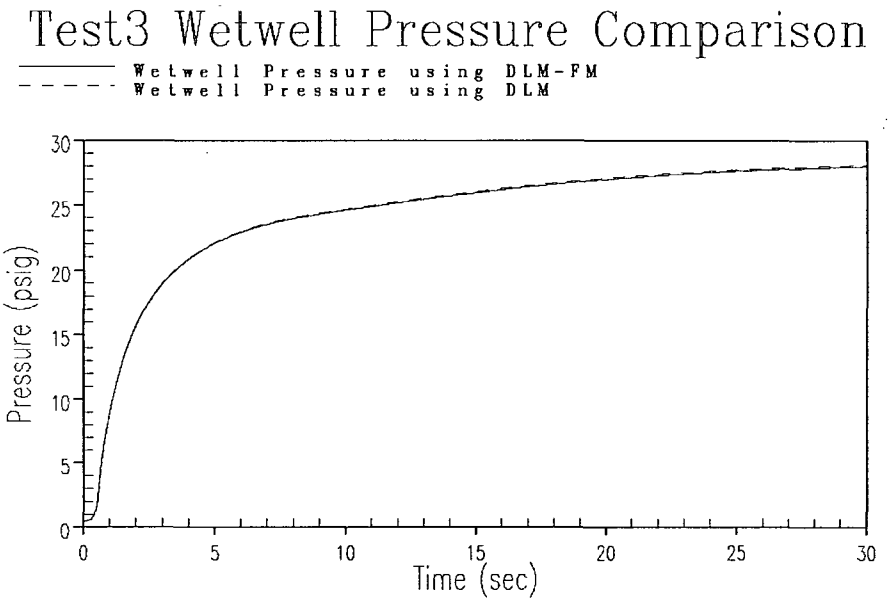

Figure 2: RSLB Peak Pressure Case Comparison (Wetwell Pressure)

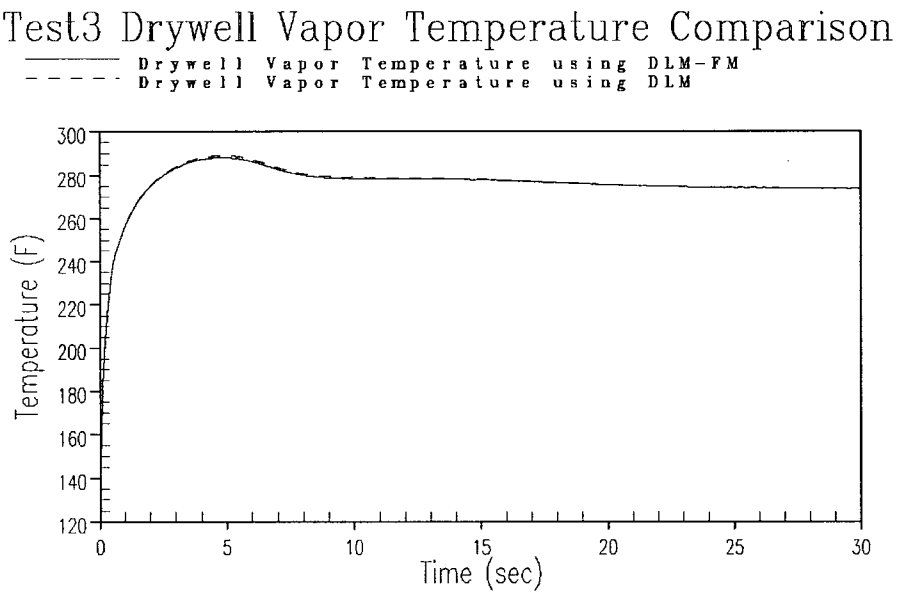

Figure 3: RSLB Peak Pressure Case Comparison (Drywell Vapor Temperature)

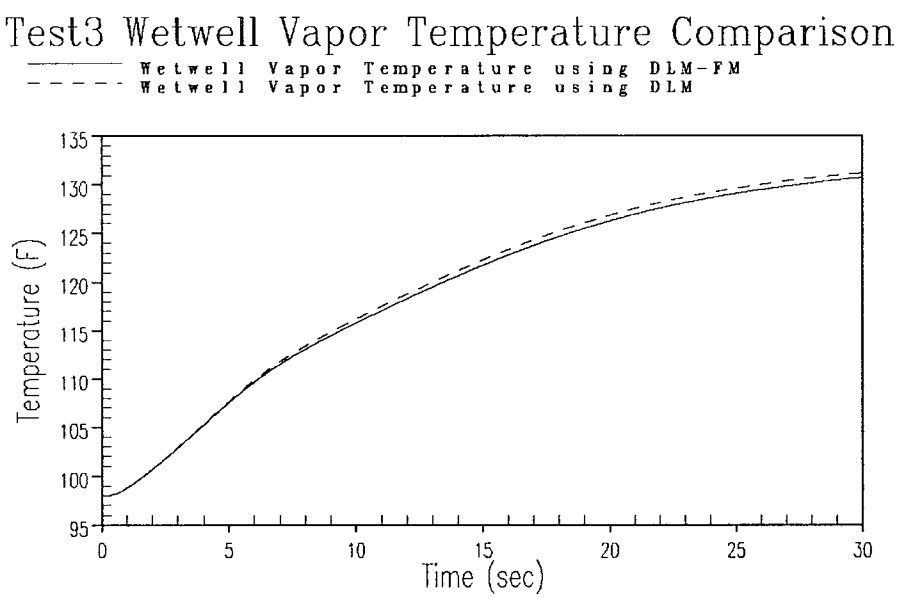

Figure 4: RSLB Peak Pressure Case Comparison (Wetwell Vapor Temperature)

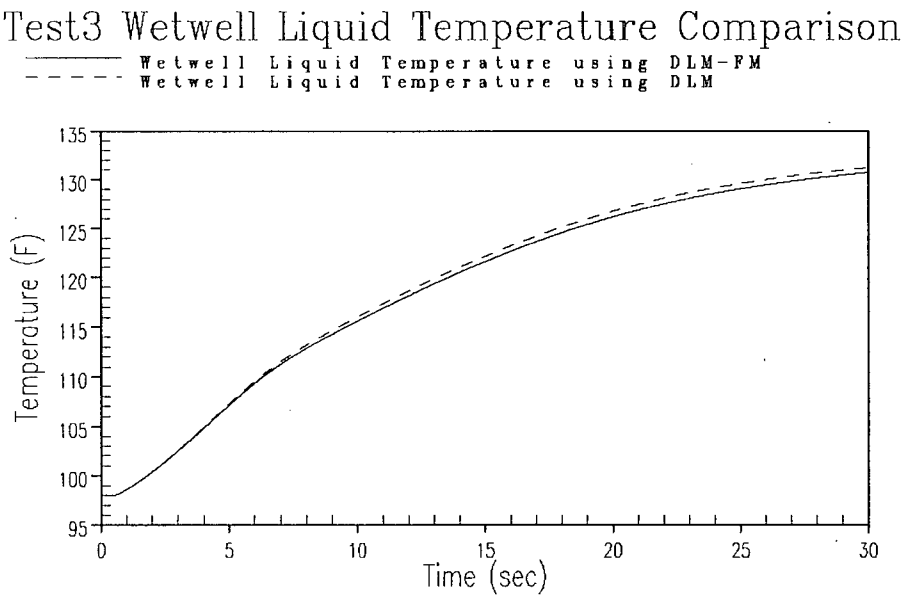

Figure 5: RSLB Peak Pressure Case Comparison (Suppression Pool Temperature)

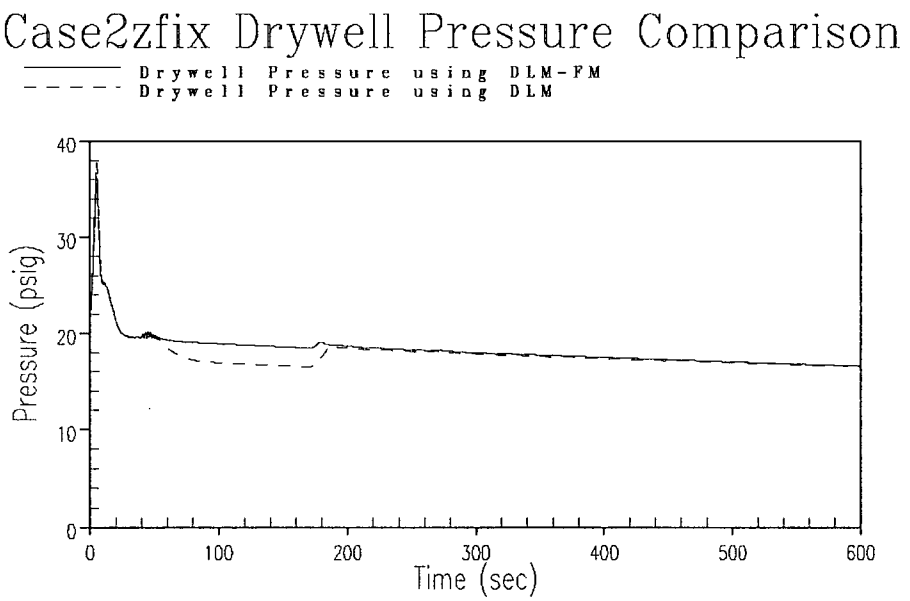

Figure 6: ECCS Minimum Backpressure Case Comparison (Drywell Pressure)

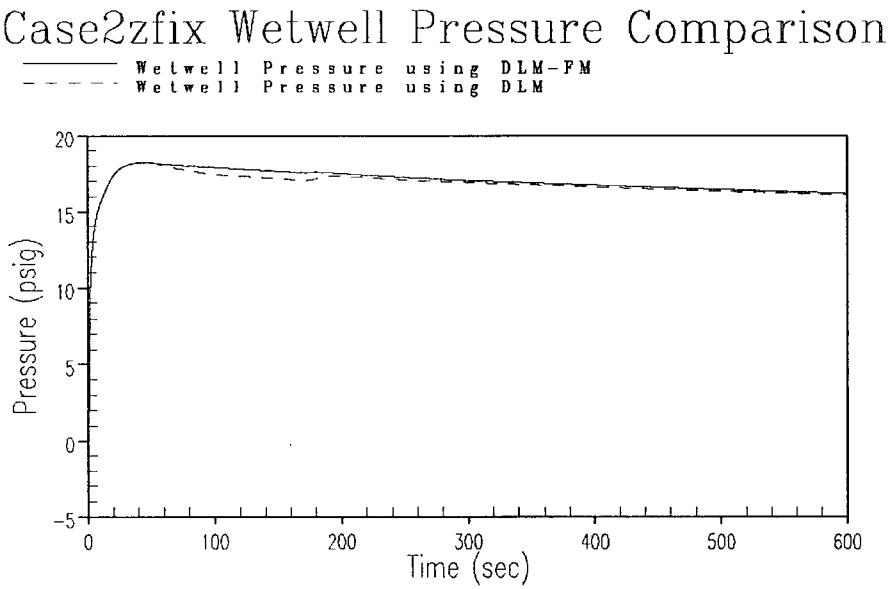

Figure 7: ECCS Minimum Backpressure Case Comparison (Wetwell Pressure)

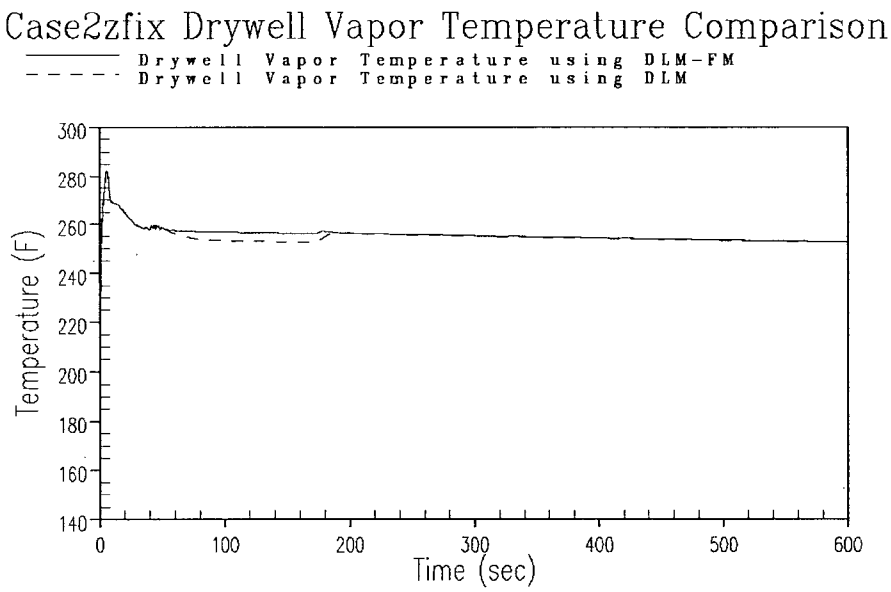

Figure 8: ECCS Minimum Backpressure Case Comparison (Drywell Vapor Temperature)

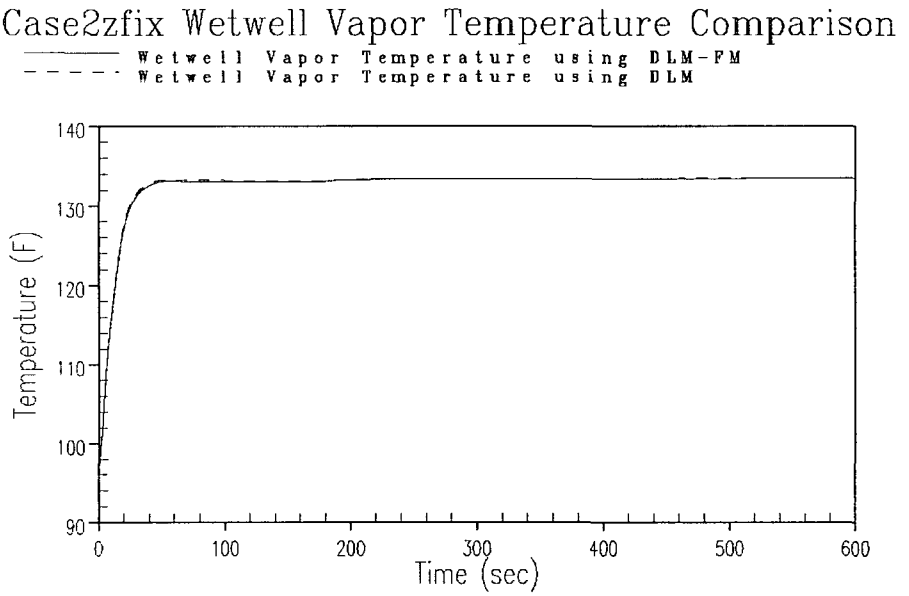

Figure 9: ECCS Minimum Backpressure Case Comparison (Wetwell Vapor Temperature)

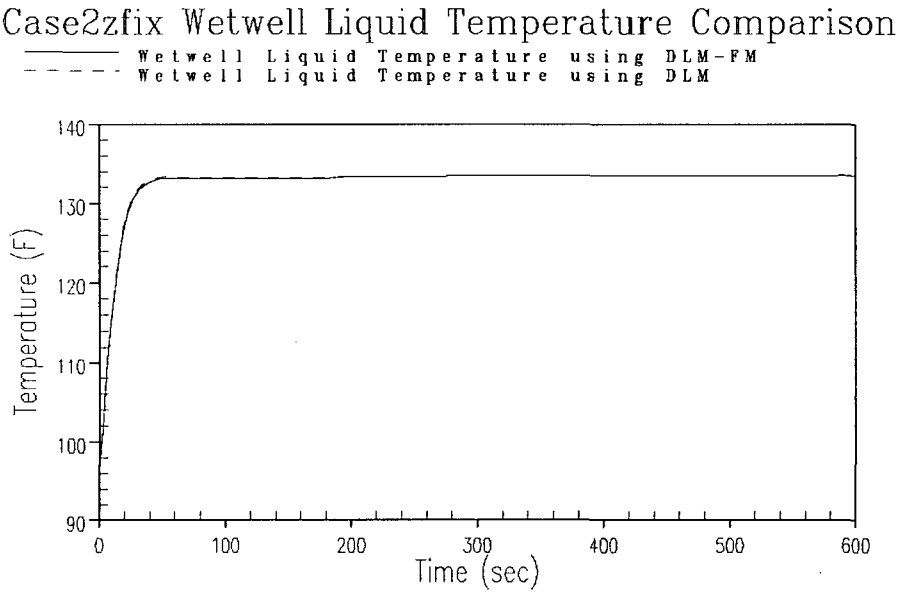

Figure 10: ECCS Minimum Backpressure Case Comparison (Suppression Pool Temperature)