



November 13, 1996

U. S. Nuclear Regulatory Commission  
Washington, D.C 20555

Attention: Document Control Desk

Subject: Steam Generator Tube Rupture Analysis for Byron and Braidwood  
Generating Stations

Byron Units 1 and 2

Braidwood Units 1 and 2

NRC Docket Numbers: 50-454, 455, 456 and 457

- References:
1. T. Schuster letter to the Nuclear Regulatory Commission dated April 25, 1990, transmitting Steam Generator Tube Rupture Analysis
  2. R. Pulsifer letter to T. Kovach dated April 23, 1992, transmitting Safety Evaluation for Byron Units 1 and 2 and Braidwood Units 1 and 2 Steam Generator Tube Rupture Analysis

Via Reference 1 the Commonwealth Edison Company (ComEd) transmitted the Steam Generator Tube Rupture for Byron and Braidwood Units 1 and 2 to the Nuclear Regulatory Commission (NRC). This submittal was approved in the Safety Evaluation transmitted via Reference 2. This Safety Evaluation is applicable to Units 1 and 2 which have Westinghouse model D-4 and D-5 steam generators, respectively. As you are aware, Byron and Braidwood will replace the Unit 1 steam generators with the Babcock & Wilcox, International (BWI) steam generators.

Physical differences between the original steam generators and the replacement steam generators impact the steam generator tube rupture analysis. To assess the impact of these differences, the steam generator tube rupture event was reanalyzed which resulted in a reduction of margin to overfill. As a result of the reduced margin, certain operator actions needed to be revised to allow the operators to isolate the ruptured steam generator if a tube rupture is suspected. The results of our revised operator actions in the revised analysis conclude that the offsite dose does not exceed a small fraction of 10CFR100 limits or the acceptance criteria of SRP 15.6.3 and that margin to overfill is available. The attached topical report, "Revised Steam Generator Tube Rupture Analysis for Byron/Braidwood," contains our reanalysis. Because the revised operator actions are applicable to Units 1 and 2, ComEd has performed a reanalysis for both units. Please note that this reanalysis was based on the same methodology as our previous analysis which was NRC approved.

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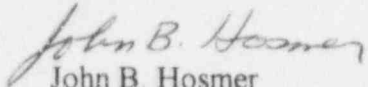
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ComEd is requesting approval of this Topical Report by April 1, 1997.

If you have any questions concerning this correspondence please contact Denise Saccomando at (630) 663-7283.

Sincerely,

  
John B. Hosmer  
Engineering Vice President

Attachment

cc: G. Dick, Byron Project Manager-NRR  
R. Assa, Braidwood Project Manger-NRR  
A.B. Beach, Regional Administrator- RIII  
C. Phillips, Senior Resident Inspector-Braidwood  
S. Burgess, Senior Resident Inspector-Byron  
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