



March 6, 1987  
IPN-87-010

John C. Brons  
Senior Vice President  
Nuclear Generation

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

Subject: Indian Point 3 Nuclear Power Plant  
Docket No. 50-286  
Criteria for Postulated High Energy  
Line Break (HELB) Locations

- References:
1. Letter to Mr. Cahill (Consolidated Edison) from Mr. Giambusso (AEC), dated December 19, 1972.
  2. Letter to Mr. Giambusso (AEC) from Mr. Voigt (Attorney for Consolidated Edison), dated May 14, 1973.

Dear Sir:

This letter serves to inform the NRC of the Authority's position on defining postulated rupture locations in high energy lines. In assessing pipe whip effects in high energy lines, the Authority intends to define the postulated rupture locations in accordance with the criteria provided in Standard Review Plan Section 3.6.2, "Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping."

Reference 1 required the assessment of the consequences of HELBs outside containment including pipe whip effects. Criteria for determining the location of postulated pipe ruptures was provided by Reference 1. In assessing pipe whip effects at Indian Point 3, pipe ruptures were postulated to occur at points of discontinuity as specified in Reference 1. The results of the Indian Point 3 HELB analyses were submitted to the AEC by Reference 2. The AEC Safety Evaluation Report on the Indian Point 3 Facility Operating License application stated that the break location criteria given in Reference 1 had been properly applied in assessing pipe whip effects. The Authority has been utilizing this discontinuity method to define postulated pipe rupture locations in assessing pipe whip effects.

Standard Review Plan Section 3.6.2 states that the acceptable criteria to define postulated pipe rupture locations inside and outside containment is provided by Branch Technical Position (BTP) MEB 3-1, "Postulated Rupture Locations in Fluid System Piping Inside and Outside Containment." For ASME

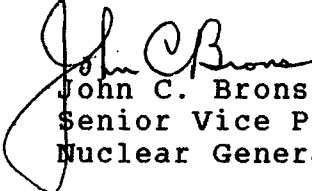
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Section II Class 2 and 3 piping, BTP MEB 3-1 states that breaks should be postulated at the terminal ends and at intermediate locations selected by either the discontinuity method or a method based on high stress location. As the high stress method is an acceptable alternative to the discontinuity method, the Authority intends to use either alternative at its discretion. The Authority will continue to utilize the methods of analysis provided by Standard Review Plan 3.6.2 for evaluating the dynamic effects associated with the postulated ruptures.

Should you or your staff have any questions regarding this matter, please contact Mr. P. Kokolakis of my staff.

Very truly yours,

  
John C. Brons  
Senior Vice President  
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cc: Resident Inspector's Office  
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