

## **NRR-PMDAPEm Resource**

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**From:** Wiebe, Joel  
**Sent:** Thursday, August 29, 2013 10:02 AM  
**To:** Leslie Holden  
**Cc:** David Gullott; Kevin Borton  
**Subject:** Preliminary RAI Regarding TB Bldg HELB

The purpose of preliminary RAIs are to ensure there is no proprietary information contained in the questions and that the questions are clear. Let me know if a teleconference is needed to discuss the request.

According to Byron and Braidwood (B/B) UFSAR Section 3.6, piping failures postulated in B/B include high energy (HE) line breaks (HELBs), HE line cracks (HELCs) and moderate energy line cracks (MELCs).

With regard to postulated piping failures, B/B-UFSAR Section 3.6 states that:

The effects of high energy line breaks in the turbine building have been evaluated with respect to potential impact on safety-related equipment located in adjoining auxiliary building rooms.

and that:

The possible effects associated with the postulated break of piping considered are structural loads due to pressurization, increases in pressure and temperature which could affect environmental qualification of equipment, and damage due to pipe whip and jet impingement.

B/B-UFSAR Section 3.6.1, Postulated Piping Failures in Fluid Systems Outside the Containment, provides the criteria for postulating locations of piping failures (HELBs, HELCs and MELCs) outside containment.

Describe in detail the postulated piping failures and their locations utilized for the analyses of M&E release from piping located in the turbine building that could affect safety-related equipment located in adjoining auxiliary building rooms and how this information was used to provide input to the Gothic analysis. If bounding conditions have been utilized for these analyses identify the piping failures utilized, their bounding M&E and the bounding locations that would envelop the resulting effects on the safety-related equipment located in adjoining auxiliary building rooms. In addition, justify how this/these M&Es and location(s) bound others. This justification should include, but is not limited to, consideration of a HE release near a HELB damper that would allow pressurization of a room while the damper is closing while another room is not yet pressurizing because its damper is farther away from the HE release, thereby creating a differential pressure across the wall that separates the two rooms.

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**From:** Wiebe, Joel

**Created By:** Joel.Wiebe@nrc.gov

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Tracking Status: None

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