

**From:** Maitri Banerjee  
**To:** ken.nicely@exeloncorp.com  
**Date:** 3/25/04 10:57AM  
**Subject:** Re: Concrete Expansion Anchors used for Pipe Whip Restraints at Dresden and Quad Cities

Our review of your letter dated September 11, 2002, which responded to NRC inspection items related to concrete expansion anchors (CEAs), has identified the need for the following additional information:

1. Exelon letter to the NRC dated September 11, 2002, indicated that Dresden and Quad Cities UFSAR Section 3.8.4.6, "Concrete Expansion Anchors," that stated CEAs were installed following manufacturer's recommendations, was revised to clarify that this section applied only to the IEB 79-02 response (i.e., not to the concrete expansion anchors for high energy restraints (HERs)). Please indicate what Code, Standard or practice accepted by the NRC for design these CEAs in safety related applications were designed to.
2. Please review the application of the CEAs used as high energy restraints that have factors of safety in the range of 2.5 to 3.8 (one at Dresden and five at Quad Cities), and discuss the safety impact of these CEAs failing to perform their safety function including restraining a pipe whip.
3. Exelon letter to the NRC, dated September 11, 2002, discussed some of the inherent conservatisms in the HER design. Please provide the results of analyses that quantify these conservatisms.

Please let me know if you would like a phone call to discuss this RAI and when you can provide the requested information.

Maitri Banerjee, PE  
Sr. Project Manager  
PDIII-2, DLPM  
NRR

**CC:** Lawrence Rossbach

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**Subject:** Re: Concrete Expansion Anchors used for Pipe Whip Restraints at Dresden and Quad Cities  
**Creation Date:** 3/25/04 10:57AM  
**From:** Maitri Banerjee  
**Created By:** MXB@nrc.gov

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