NRC Feedback on "KHNP's Draft Revised Response to RAI 129-8085, Question 3.8.1-1" (Draft Response Provide 2/19/16)

The staff evaluated the draft response to Question 3.8.1-1 and noted the following:

a. Acceptable – Confirmatory Item (CI)

b. Defer to the resolution of RAI 252-8299, Question 03.07.02-7

c. Staff is coordinating the appropriate Chapter reviewer to evaluate the methodology for calculating the hydrogen generation pressure load.

d. Acceptable - CI

e. The first paragraph of the RAI response states "Thus, there is no connection to transfer POSRV actuation loads to the containment wall. Therefore, POSRV actuation loads are not applied to the containment basemat through the containment wall." Since the POSRV loads also apply a pressure load on the IRWST floor slab which is on top of the RCB basemat, then POSRV loads can affect the RCB basemat directly (i.e., not through the containment wall) and also may have an effect on the dynamic overall building response in terms of member forces and building response spectra. The basis for not considering these effects should be provided or an evaluation should be performed to consider these loads.

The remaining paragraphs of the response, including the response to Question 03.08.03-1 of RAI No. 208-8245, do not adequately demonstrate that there will be no overall building response in terms of member forces and building response spectra. The RAI response indicates that the hydrodynamic pressure load is a short transient pressure time history, the period of the POSRV discharge load is very short, and the load rapidly decreases in magnitude. This type of hydrodynamic pressure time history is similar to safety relief valve transients in other nuclear power plants which have shown in some cases to cause significant loading on the overall building response and response spectra. Therefore, the applicant is requested to provide further justification to address this item.