

APR1400
Feedback on Draft Response to RAI 255-8285, Question 03.08.05-13
Prepared August 3, 2016

The response is acceptable except for addressing the items below.

Item (1)

The response correctly states that the severe accident load is not considered for the basemat analysis and design, and the severe accident was changed to combustible gas control inside containment. However, the last load combination in Table 1 still identifies a load combination named "Severe Accident" and added a new footnote 11 which states that this is "Beyond design load combination." Also, it identifies Ps as the load to include in this load combination; however, Ps was defined in the response to RAI Question 3.8.1-1 as the load developed from hydrogen generation due to fuel clad water interaction, not severe accident events. So this is an inconsistency that should be addressed. Also, as discussed in the past, normally severe accident evaluation is addressed as part of Section 19 of the DCD, not Section 3.8, and the hydrogen generation load combination needs to be included in Table 1 (RCB) and then combined with the appropriate load combination in Table 2 (AB) because the two structures are supported by the common basemat.

Item (2)

The response states that "There is no impact on any Technical, Topical, or Environmental Report." However, the revised Tables 1 and 2 should be incorporated into the KHNP technical report APR1400-E-S-NR-14006-P, Rev. 1. Also, the load combinations in Tables 1 and 2 are not consistent with the load combinations presented in Table 3-5 of the technical report. Lastly, Table 3-5 of the technical report separates RCB load combinations from AB load combinations for Test, Normal, and Abnormal loading combinations, while providing RCB and AB (combined) load combinations for only Abnormal/Extreme. This needs to be explained or revised because all load combinations (not just Abnormal/Extreme) need to be considered for the combined RCB and AB basemat analysis, since the basemat is common and monolithic to both structures.