APR1400
Feedback on Draft Response to RAI 255-8285, Question 03.08.05-9
Prepared August 2, 2016

Item (1)

Acceptable because the response indicates that the explanation for static and dynamic differential settlement is discussed in RAI Question 3.8.5-7, and the staff will evaluate it there. Note that this issue, on differential settlement, is also currently addressed in RAI Question's 3.8.5-16 & 17.

Item (2)

The response indicates that the construction sequence analysis is deferred to RAI Questions 3.8.5-7 and 18. This is acceptable. Regarding the markup for COL Item COL 3.8(8) that was provided in this RAI response, it does not address the monitoring of differential settlement related to angular distortion. This issue was identified in RAI Question 3.8.5-18. The COL Item should identify the criteria for monitoring differential settlement associated with tilt (i.e., the 0.5 inch per foot currently identified in the DCD and technical report) and the differential settlement associated with angular distortion (as discussed in the original RAI Question 3.8.5-18). The acceptance criteria for differential settlements associated with angular distortion can be obtained from the settlement contours calculated beneath the basemat. Also, explain why the monitoring program is to be developed in accordance with Regulatory Guide 1.160, since the regulatory guide does not provide such guidance.

Item (3)

The response is acceptable; however, as agreed to in the NRC audit during the week of 6/20/16, the applicant will capture the effect of varying soil types in the other RAI(s) related to settlement and will also address this in COL Item 3.8(8) for site-specific settlement to be confirmed by the COL applicant (see Item (2) above).

Item (4)

Acceptable because the response indicates that (1) the issue of stiff and soft soil spots, and potential loss of cement from mud mat will be addressed under RAI Question 3.8.5-7 (and COL Items provided therein), and (2) the issue of stiffness modeling of the soil subgrade will be addressed under RAI Question 3.8.5-8.