

REQUEST FOR ADDITIONAL INFORMATION NO. 83-1007 REVISION 0

10/8/2008

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 06.05.03 - Fission Product Control Systems and Structures

Application Section: 6.5.3

QUESTIONS for Containment and Ventilation Branch 1 (AP1000/EPR Projects) (SPCV)

06.05.03-2

6.5.2:

It is not clear how the spray water will dissolve NaTB from the baskets, and how it will mix with the water in the RWSP to achieve pH > 7. Please, provide details on:

A. the NaTB baskets are located in the periphery of the containment (near the outside wall), and only spray water from Ring D can reach these baskets. What happens if this ring D does not operate or partially operates? Some baskets may not be reached by spray. And how the distribution of 23 baskets into three groups/containers was selected?

B. the NaTB dissolution, transport and mix with the rest of the RWSP water is a function of time. Please, discuss the effect of non-uniform NaTB distribution, including potential entrapment of NaTB in dead-ended areas of the containment.

C. provide supporting calculation of pH being >7, given the NaTB of 44,100 lbs and boric acid being dissolved in the maximum RWSP water inventory.