

April 25, 1983

Page 2 of 2TO: Melanie Miller  
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¶ Generically, the maximum UHI delivery volume consistent with the plant tank nominal setpoint results in the highest calculated peak clad temperatures for analyses using perfect mixing assumptions in the upper head. Conversely, the minimum UHI delivery volume consistent with the plant nominal setpoint (900 cu ft for Sequoyah) results in the highest calculated clad temperatures for analyses using imperfect mixing.

¶ A sensitivity study analysis has been performed to verify that the above UHI accumulator delivery parameters are those that result in the highest calculated peak cladding temperatures for perfect mixing and imperfect mixing assumptions in the upper head. The results of these analyses for perfect mixing are shown in Table 2 and verify the value assumed in the Sequoyah ECCS analysis evaluation of 2.1 °F / cf water for the limiting case break with perfect mixing sensitivity. Hool

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TABLE 1

PERFECT MIXING SENSITIVITY  
DECLG,  $C_D = 0.6$

UHI Admission  
Pressure

1200 psia

UHI Volume Delivered / PCT, °F

870 ft<sup>3</sup>

1020 ft<sup>3</sup>

1835

2147