Supplemental RAI Request for RAI 6.2-58

6.2-58 In GE's response to RAI 6.2-58 (MFN 06-348) various single active failures were considered in regards to the emergency core cooling system analysis. However, the intent of this RAI was to identify the limiting sequence considering the worst single active failure with respect to peak containment pressure.

For example, why is not a MSLB or FWLB with a failure of a shut-off valve in one of the standby liquid control system trains(SLCS) considered for peak pressure containment analysis? It is noted in the DCD, Subsection 9.3.5.2, that the operation of the accumulator vent could limit the amount of nitrogen injected into the reactor vessel by assisting in reducing accumulator pressure.

Considering a failure of a shut-off valve in one of the SLCS trains from the onset of the failure of the shut-off valve to close until the accumulator tank depressurizes (with the assistance of the accumulator vent) to cease further nitrogen release into the vessel, how much nitrogen could be transported to the reactor vessel? Considering all relevant delays and action, how would this event affect peak ESBWR containment pressure calculations?