

From: Markley, Michael
Sent: Wednesday, September 16, 2009 4:34 PM
To: rmurill@entergy.com
Cc: Kalyanam, Kaly; Lent, Susan; Burkhardt, Janet
Subject: Clarifications on RAIs

Bob,

Below are the clarifications from the technical reviewer regarding the NRC's RAIs. I am asking the Waterford PM to set up a telecon to ensure you have a mutual understanding of what the NRC is asking.

1) Regarding boron credit argument (1000 ppm/10%Dk/k margin) - Regulations in 50.68 require two conditions when crediting boron: 1) keff is less than 1 unborated and 2) keff less than or equal to 0.95 borated. 50.68 requires both conditions, not one or the other. Therefore, the boron argument does help meet the unborated requirements.

2) Regarding 0.5% Dk/k margin argument - The staff did not identify issues with the revised Holtec analysis that will reduce the 0.5% Dk/k margin, except for potentially, the issue at hand regarding the lack of consideration for the fission products and actinides in the criticality code validation. However, the staff views that treatment of specific power and operating history in accordance with NUREG-6665, "Review and Prioritization of Technical Issues Related to Burnup Credit for LWR Fuel," reduces the available margin by 0.2% Dk/k to 0.3% Dk/k.

3) Regarding the other conservatisms discussed (i.e., structural components, tolerances, depletion parameters) - If the licensee seeks to credit these conservatisms, they should be quantified and justified, and then show their effect on the overall reactivity determination. The licensee should be cautioned however, that while the assumed parameter values may be conservative relative to the "average" assembly or most of the assemblies in the pool, the assumption may not necessarily be significantly more conservative relative to the limiting assembly.

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