

From: Christopher Boyd , *RES* .
To: Ralph Caruso
Date: Tue, Jul 25, 2000 8:38 AM
Subject: Re: RE: Spent Fuel Pool Heatup calculations

Ralph,

I would argue that the steam flow is important. It is unclear to me how you guys determine it. I would not feel comfortable if it were set arbitrarily. In the work I performed, I followed the following steps to determine steam flow.

- 1 Guess at massflow of steam.
- 2 Run calculation and determine heat to water (radiation and conduction)
- 3 Calculate massflow based on heat to water (or other iteration scheme)
- 4 Repeat 2 and 3 until mass flow of steam and heat into the water are consistent with one another.

For a transient calc, this will be a little more difficult because the heat into the water will vary with time. This variation should be assessed and the steam flow rate could be adjusted once or twice during the transient.

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