

## PMNorthAnna3COLPEmails Resource

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**From:** Kallan, Paul  
**Sent:** Monday, July 02, 2012 9:54 AM  
**To:** NorthAnna3COL Resource  
**Subject:** FW: NA3 RAI 6198 (letter #96), Question 09.02.05-2

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**From:** Kallan, Paul  
**Sent:** Thursday, May 10, 2012 7:43 PM  
**To:** [Barry.bryant@dom.com](mailto:Barry.bryant@dom.com)  
**Subject:** FW: NA3 RAI 6198 (letter #96), Question 09.02.05-2

Hi Barry,

Here is input from staff on the 3 items for the call for this Tuesday.

regards,

Paul

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**From:** Wheeler, Larry  
**Sent:** Thursday, May 10, 2012 4:02 PM  
**To:** Kallan, Paul  
**Cc:** Harvey, Brad; Quinlan, Kevin; Mazaika, Michael; McKenna, Eileen  
**Subject:** NA3 RAI 6198 (letter #96), Question 09.02.05-2

Paul:

Here are the 3 items the staff plans to talk about on the call this Tuesday with Dominion.

Item 1:

Response part a, Dominion states:

The maximum 0% exceedance ambient wet-bulb temperature of 84.9°F (SSAR Table 2.3-18) was used to evaluate the heat removal capability of the UHS during an accident. This wet-bulb temperature conservatively envelopes the worst 1-day (78.9°F) and 5-day (77.6°F) daily average wet-bulb temperatures described in SSAR Section 2.3.1.3.8. An analysis shows that the UHS is capable of removing Essential Service Water System heat loads during all plant operating and accident conditions at a wet-bulb temperature of 84.9°F.

This RAI response appears to conflict with FSAR Section 9.2.5.3 (R/5) which states:

During normal power operation, the UHS basin water temperature is at or below 93°F under the worst-case ambient conditions (i.e. wet bulb temperature of 84.9°F based on the 0% annual exceedance value).

Action: Dominion to consider FSAR change to include the normal and accident conditions at a WB of 84.9 F.

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Item 2:

Response part c, Dominion states:

The UHS cooling tower basin water temperature surveillance requirement (SR 3.7.9.2) verifies that the UHS water temperature is  $\leq 93$  F **once per 24-hour period**. This operability limit for the UHS is confirmed by analyses using the 0% exceedance ambient wet-bulb temperature of 84.9 F (SSAR Table 2.3-18).

The staff wants to know if this temperature is read during the UHS expected peak temperature (say mid-day) or some other specified time.

Action: Dominion to consider TS Bases discussion to state that the UHS basin temperature will be recorded during expected peak temperatures.

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Item 3:

Response part c, Dominion states:

The UHS cooling tower basin water temperature surveillance requirement (SR 3.7.9.2) verifies that the UHS water temperature is  $\leq 93$  F **once per 24-hour period**. This operability limit for the UHS is confirmed by analyses using the 0% exceedance ambient wet-bulb temperature of 84.9 F (SSAR Table 2.3-18).

The staff wants to know how the 0% exceedance is actually used. For example, is this maximum embedded as a single value among a set of other ambient conditions that span the length of an accident (and some other operational) period, or is the 0% exceedance ambient wet-bulb temperature assumed to persist for the entire duration of the accident (and some other operational period).

Action: Dominion to consider RAI response and FSAR change to address this item.

Thanks

Larry Wheeler  
US Nuclear Regulatory Commission (NRC)  
Office of New Reactors (NRO)  
Division of Safety Systems and Risk Assessment (DSRA)  
Balance of Plant/Technical Specifications Branch (BPTS)  
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