From: Paige, Jason
Sent: Wednesday, December 08, 2010 11:13 AM
To: Franzone, Steve; Tiemann, Philip
Subject: Request for Additional Information RE Met Data to Support AST LAR

Steve, below is the RAI that AADB generated regarding the Turkey Point met data to support the AST license amendment request. The RAI was discussed with FPL during a teleconference on Tuesday, December 7, 2010. If you have any questions regarding the RAI, please feel free to contact me.

1. The following summarizes several points of information provided by Florida Power & Light (FPL) in Attachment 1, item 4, of a June 23, 2010 letter response (ADAMS Accession No. ML101760019) to a Nuclear Regulatory Commission e-mail request for additional information dated May 28, 2010 (ADAMS Accession No. ML101480750).

   a) Approximately 50% of the as-found and as-left data fell within the ±0.18° F criteria specified in Regulatory Guide (RG) 1.23, Rev. 1, "Meteorological Monitoring Programs for Nuclear Power Plants," while approximately 90% of the data fell within ±0.54° F.

   b) The instruments used to measure temperature difference as a function of height (ΔT) experienced some drift between 2005 and 2009 which, for purposes of the discussion provided in Attachment 1, was assumed to be linear in behavior.

   c) A six month representative ΔT value can be derived by taking the average of the beginning and end ΔT values for each temperature channel.

   d) Since a number of the ΔT values have been observed to be outside of the accepted range, the averaged ΔT value for each channel was applied as a bias or correction factor to the hourly meteorological data. The effects of this correction were small shifts in the calculated stability classes for the hourly meteorological data and resulted in small changes to the calculated atmospheric dispersion factors (X/Q values).

   e) When the resultant biased X/Q values exceed the unbiased X/Qs, the more conservative value will be used. This technical approach will assure conservative radiological dose consequences for the analyzed design basis accidents.

   Given the uncertainties in a number of the reported hourly measurements and that the data are being used to calculate 95 percentile rather than average X/Q values, what is the basis for concluding that use of the methodology described above, assuming that drift is linear and estimated averages are representative, will assure conservative radiological dose consequences for the analyzed design basis accidents? What is the sensitivity of the analysis to more limiting assumptions such as non-linearity and use of limiting drift values?

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