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RULES AND DIRECTIVES  
BRANCH  
USNRC

**Draft Regulatory Guide DG-1164 – COMMENTS**

Dear Brad,

The Nuclear Regulatory Commission (NRC) should be lauded for attempting to revise draft Regulatory Guide 1.23 and to incorporate the voluntary consensus standard, ANSI/ANS 3.11 (hereafter, "3.11"), as part of this revised guidance. From a scientific perspective, the meteorological community must ensure that the measurement and modeling capabilities of any operating nuclear plant utilize systems that provide the information necessary to assess present or climatic conditions. Fundamentally, the science identifies the equations of motion (see 3.11, Appendix C, "Overview") that are the basis for designing the monitoring system, and thus, regulatory guidance is designed to ensure that acceptable measurements are made. As monitoring technologies improve, the measurements that can be taken also improve thereby enabling measurements that can better quantify the components of the equations of motion. In previous decades, meteorological instrumentation was limited in function, but as electronic components improved, the means by which to build a better instrument have proliferated. Obviously, these types of improvements extend to all types of measurement systems at any given operating nuclear power plant, and these improvements are incorporated many times over during the operating lifetime of the power plant. In many, if not nearly all, cases, the improved systems result in better performance, less maintenance and decreased operating costs for the plant.

In order to address improvements in meteorological monitoring and modeling technologies, the NRC should include a statement or statements that address these changes and improvements. This is especially true for cases where a meteorological monitoring or modeling system is being "upgraded" due to age or when any change to the system is warranted including the expansion of the system to include additional power plant sites. A review of appropriate new technologies should be undertaken by trained meteorologists (or

*SONSI Review Complete*

*F-REDS=ADM-03  
Add = R.B. Harvey (RBH)  
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*Template = ADM-013*

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Brad Harvey  
SRNL-ATG-2006-00018  
Page 2  
November 27, 2006

other appropriate personnel) when upgrades and changes are warranted. This practice should be encouraged by the NRC in much the same way that it is encouraged within 3.11 (see the Forward). The goals of such encouragement are to ensure that the meteorological monitoring and modeling systems used will utilize up-to-date technologies that provide improved and likely, cost effective, data sources. This encouragement need not be prescriptive since technologies can and do change faster than regulatory guidance documents can be issued. Just the same, addressing technology change within a revised Regulatory Guide 1.23 document will ensure its appropriateness over time.

Thank you for this opportunity to comment upon this document. Please feel free to contact me if you have any questions or comments regarding this memorandum.

Sincerely,



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