

*Revision 1 to Regulatory Guide 1.23, "Meteorological Monitoring Programs for Nuclear Power Plants"*

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The recently issued Revision 1 to Regulatory Guide 1.23, "Meteorological Monitoring Programs for Nuclear Power Plants," provides licensees and applicants with improved guidance concerning criteria for an onsite meteorological measurements program that the staff of the U.S. Nuclear Regulatory Commission (NRC) considers acceptable for the collection of basic meteorological data needed to support U.S. commercial nuclear power plant licensing and operation.

Each nuclear power plant site has multiple needs for an onsite program to measure and document basic meteorological data. These data may be used to develop atmospheric transport and diffusion parameters that, with appropriate atmospheric dispersion models, may be used to estimate potential radiation doses to the public resulting from actual routine or accidental releases of radioactive materials to the atmosphere or to evaluate the potential dose to the public and control room as a result of hypothetical reactor accidents. These data may also be used to assess non-radiological environmental effects resulting from the construction or operation of a nuclear power plant, such as the impacts of the plant's heat dissipation system. Regulatory guide 1.23 describes a suitable onsite program to provide meteorological data needed to estimate these potential impacts.

Revision 1 of Regulatory Guide 1.23 replaces the original version issued in February 1972. Revision 1 clarifies regulatory requirements and updates regulatory guidance regarding the criteria for an onsite meteorological measurements program to collect the basic meteorological data needed to support plant licensing and operation. In so doing, this revision better reflects current regulatory requirements and best practices, using guidance provided in ANSI/ANS-3.11-2005, "Determining Meteorological Information at Nuclear Facilities," where appropriate, with explicit references to the NRC's regulatory requirements.

This presentation will discuss the history of Regulatory Guide 1.23, including the three previously proposed revisions which eventually lead to the issuance of Revision 1. The goals for revising the regulatory guide, such as providing an updated list of applicable regulations, linking regulatory guidance to regulatory requirements, updating the monitoring criteria, and clarifying emergency planning guidance, will be covered. Major changes from Revision 0 to Revision 1 will be highlighted and a synopsis of the 110 public comments received on the draft version (DG-1164), along with a summary of the resulting changes, will be provided.