

# **The Role of Meteorology in the Nuclear Power Industry**

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## **ABSTRACT**

The science of meteorology plays several roles in the nuclear power industry. Meteorological measurements are used as input for decisions on site acceptability (design basis accident analyses), plant construction, plant procedures, emergency response, and continued operation (ODCM dose projections) of the plant.

The Nuclear Regulatory Commission has provided guidance on the collection, reduction, and application of meteorological data. A summary of this guidance, as well as other appropriate information, is presented.

The NRC focus on risk-informed and performance-based regulation, coupled with the deregulation of the electric generating industry, has led to reductions in staff and discretionary spending in our industry. Resources are expended in the areas that directly affect electricity generation, and other areas may not receive as much attention as they have in the past.

Framatome ANP, responding to current issues in our industry, has developed a software application to aid non-meteorologists in maintaining high quality meteorological data. This application allows for data storage, data checking, data editing, and the determination of annual data summaries and atmospheric dispersion factors. Further discussion is provided on this software application and how it can help the non-meteorologist in charge of the plant's meteorological monitoring system.