

U.S RADIATION PROTECTION BEST PRACTICES



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Introduction

Throughout the United State, various processes, methods or criteria are used to implement the U.S. Nuclear Regulatory Commission's radiation protection regulations. While these practices generally meet the regulator's requirements, some provide enhanced protection to workers and the public towards excellence in performance. During the development of the U.S. Radiation Protection Best Practices initiative, nuclear power plant Radiation Protection Managers determine the processes, methods or criteria that represent the most appropriate response for a specific issue or problematic situation based on current philosophies, science and available technology. These Best Practices are then adopted as the U.S. standard and implemented in the radiation protection programs at U.S. nuclear power plants.

Objectives

The objective of the U.S. Radiation Protection Best Practices initiative is to document those processes, methods or criteria that represent the best practice for a specific issue or problematic situation based on current philosophies, science and available technology. These Best Practices are then adopted as the U.S. standard and implemented at U.S. nuclear power plants. Temporary transient nuclear workers and utility-shared resources are routinely used during refueling outages. As such, establishment of standardized processes and procedures reduces the potential for worker confusion leading to error while working in the plants.

Methods

Nuclear power plant Radiation Protection Managers (RPMs) formed a steering committee to determine industry best practices. This steering committee, comprised of industry RPMs, prioritizes issues and practices to be evaluated, reviews existing industry radiation protection procedures that provide guidance to the radiation protection staff, and drafts the industry best practice document(s) for the issue of concern. These best practices are then discussed at a weekly conference call with additional RPMs for concurrence prior to finalization and publication. Radiation Protection Industry Best Practices are posted on the Institute for Nuclear Power Operations' (INPO) website for use by all U.S. nuclear power plant Radiation Protection personnel. The committee will periodically review and revise these documents, as necessary, to provide additional clarity and contemporary technical content.

Results

This initiative is an ongoing process. To date, over five (5) U.S Radiation Protection Best Practices have been developed with several others in the queue for development. Several nuclear power plants have adopted some or all of these Radiation Protection Best Practices.

Discussion and Conclusions

The following U.S. Radiation Protection Industry Best Practices have been published:

- Identification and Controls for Work with Radiological Risk
- Stop Work Authority
- Alpha Monitoring
- Control of Radioactive Material Outside (the plant)
- Station ALARA Committees

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