

N126. Dose Reduction During Inspection Of Germany PWRs

A comparison of the more recent so-called "convoy" plants with earlier PWRs shows a dose reduction of over 90%. It is the opinion of this author that building and construction of a plant is the most efficient contribution to dose minimization. Inspection doses for the new plants amounted to 9.6 rem in 1990 and 17.9 rem in 1991. Factors contributing to these improvements include use of quick-disconnect insulation on pipes, filling pipes with water whenever possible to improve gamma shielding, decontamination of major components before work begins, greater use of remote inspections, more detailed planning, increased use of training exercises for steam generator access, careful planning and testing before work begins, reduction of the extent of testing or eliminating testing when possible, use of photodocumentation of all important components, common scheduling of maintenance work and inspections when possible.

Taken From: "Trends of Occupational Exposure of Personnel in German PWRs, Part II: Possibilities to Monitor & Reduce Individual Dose Rate During Inspections," W. Bentele (Neckar Nuc. Power Plant, Gemeinschaftskernkraftwerk, Neckar GmbH, 7129 Neckarwestheim, Germany). Pres. at the Workshop on Work Management & Occupational Dose Control, OECD NEA, Paris, February 4-6, 1992.

