

3448. MANAGEMENT FOR THE OPTIMIZATION OF RADIATION EXPOSURE IN SPANISH NUCLEAR POWER PLANTS

During the 1980's, the criteria for optimization of radiation exposure were implemented at Spanish nuclear power plants through "Dose Reduction Programs", promoted and supervised basically by the Radiological Protection Services of the plants. Although application of these optimization programs provided good results, in 1991 the Regulatory Body (CSN) and utilities (UNESA) started to study ways to involve the entire plant organization in the programs with a view to improving the effectiveness of the optimization process. Several approaches were studied, based on the principle that this should not mean any important modification to the plant organization nor an increase in production costs. Finally, a basic organization model was developed for adaptation to the different Spanish plant organizations.

This model defines three levels of responsibility: management, plant and executors, assigning specific functions to each. It also includes general criteria relating to motivation and commitment, personnel awareness at all levels, training, collective dose budget, documentation and contractor relations.

Most of the plants have incorporated this management model into their organizations in recent years, without significant changes. The results obtained recently as regards collective doses, including steam generator and vessel head replacement operations, suggest that the approach has been quite effective.

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