

**TRAINING COURSE  
" RADIATION PROTECTION FOR NUCLEAR FACILITIES "**

**DRAFT CARD**

<p><b>Course Objective:</b> Provide basic formation on Radiation Protection for workers and public</p> <p><b>Duration:</b> one week</p>	
<p><b>CONTENT</b></p>	
Introduction to Radiation Protection of public and workers	The radioactivity, ionizing radiations, natural background. The meaning of "exposure" to radiations. Concepts of external and internal exposure
Effects of radiation	Interactions of radiations with matter in general: Interactions of radiations with living matter. Exposure, Contamination, Dose evaluation
ICRP recommendations and International safety standards	The Radiation Protection Doctrine, Basic Principles, Radiation protection System. The ICRP Recommendations, IAEA Safety Standards, The EURATOM Directives
National legislative and regulatory framework	Development of national legal and regulatory framework for radiation protection of workers and public. Concept of regulatory pyramid and consistency with international legal instruments.
Radiation protection in a NPP and related issues	Source of radiations, Shielding, Ventilation, Monitoring. Access control and concept of controlled areas and related requirements. Concept of radiation protection system in a NF. Principles of Limitation, Justification and Optimization (ALARA Concept) Physical surveillance and Medical surveillance of workers. Limits, levels and constraints. Classification of workers and personnel control-monitoring requirements (dosimetry)
Radiation protection of Public around a nuclear facility and related issues	The population exposure and exposure pathways. The representative Person. Discharge (effluents) limitations. Environmental monitoring. Dose evaluation. Emergency situations. Emergency plans

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