



INSC Project MC3.01/13

EC Contract N° NSI/2014/343-969

“Training and Tutoring for experts of the NRAs and their TSOs for developing or strengthening their regulatory and technical capabilities”

Regional Training Course

Basic nuclear safety concepts, regulatory function, licensing management and decision making

organized by ITER-Consult in cooperation with CNSNS

Mexico City – February 12th – 16th, 2018

Hosted by Comision Nacional De Seguridad Nuclear Y Salvaguardias (CNSNS)
Dr. José Ma. Barragán 779, Narvarte, Ciudad de México. C.P. 03020

Course Objective

The Regional Training Course provides an overview of the basic concepts of nuclear safety, with focus on the regulatory review and evaluation function related to the licensing process. The safety objectives, principles and requirements of NPP technology including RW management facilities, are presented together with their evolution in the last decades, in particular in the development of Defence in Depth (DiD) principles after the severe accidents of Three Mile Island, Chernobyl and Fukushima.

The course will present and discuss the safety requirements for: independence among levels of the DiD, redundancy, independence, diversification, equipment qualification, use of probabilistic safety analysis, RW management activities, decommissioning of nuclear facilities and transport of radioactive material. Attention is given to IAEA safety standards and EU approaches including WENRA safety objectives and reference levels.

Particular attention is devoted to the Nuclear Regulatory Authority (NRA) function for licensing and oversight of nuclear facilities with reference to: establishing of safety objectives and requirements, planning of activities, management of documentation, coordination of internal review work of the NRA, planning and carrying out regulatory inspections, coordination of licensing interfaces with the applicant and other involved institutions, coordination of external technical support (TSO) and related challenges.

One Practical application is included in the program, which gives the possibility to the trainees to work in groups and exchange their experience.



resources & energy



Course Daily Program

Wednesday 14th February, 2018

9.00 – 13.00	Radiation protection requirements for facilities and environment – A. Paz García Beltran (CNSNS)
	Structure and content of the Safety Analysis Report (SAR) for NPP – D. Nyisztor (HAEA)
	NRA management of Licensing process and decision making – D. Nyisztor (HAEA)
13.00 – 14.00	Lunch
14.00 – 17.30	Regulatory review of SAR for a Nuclear facility – D. Nyisztor (HAEA)
	New regulatory challenges for new reactor design – N. Vlahov (BNRA), A. Madonna (ITER)

Thursday 15th February, 2018

9.00 – 13.00	Safety conception of NPP and regulatory use of PSA – R. Caporali (ITER), D. Nyisztor (HAEA)
	Feedback from Fukushima accident in the safety conception of NPP – R. López Morones (CNSNS)
	Accidental Radiological consequences from a NPP - R. López Morones (CNSNS)
13.00 – 14.00	Lunch
14.00 – 17.30	Practical Application on main safety requirements for NPP conception

Friday 16th February, 2018

9.00 – 13.00	Safety requirements for RW management – M. Dionisi (ISPRA), K. Slavcheva (ITER)
	Decommissioning of nuclear facilities: strategy, approach and requirements - M. Dionisi (ISPRA), A. Madonna (ITER)
	Regulatory transparency – K. Slavcheva, A. Madonna (ITER)
13.00 – 14.00	Lunch
14.00 – 17.30	Course summary
	Questionnaire
	Round table with the trainees
	Training Minutes
	Certificates

Monday 12th February, 2018

9.00 – 13.00	Registration
	Welcome, Organizational aspects, Training objective and program (ITER)
	EU legal framework & infrastructure for Nuclear & Radiation Safety – A. Madonna (ITER)
	Roles and responsibilities of nuclear regulatory authority – A. Madonna (ITER)
13.00 – 14.00	Lunch
14.00 – 17.30	NPP safety functions and main safety requirements to be implemented in the design of a NPP - M. Gasparini, M. Gregoric (ITER)
	Regulatory function in defining safety objectives, principles and requirements for NPP – N. Vlahov (BNRA)

Tuesday 13th February, 2018

9.00 – 13.00	Regulatory licensing process and licensing steps – N. Vlahov (BNRA)
	Regulatory Inspection, inspector competence, attitude and enforcement actions – N. Vlahov (BNRA)
13.00 – 14.00	Lunch
14.00 – 17.30	Conduct of inspections, reporting and use in the regulatory process – P. Ruiz López (CNSNS)
	Defence in Depth concept applied in a NPP – M. Gregoric, A. Madonna (ITER)