



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”

Training Course

NPP siting regulatory requirements & licensing

organized by ITER-Consult

Roma – May 11 – 15, 2015

Course Objective

The course will provide a comprehensive presentation of required site safety analyses and their logical progress and sequence starting from the preliminary survey of potential sites and consequent screening phases.

The course will present and discuss the major site events (natural and non) and the related required detailed analyses to identify and define the engineering measures to be taken into account in the design of the NPP.

The impact of the NPP on the site for radiological and non-radiological aspects will be presented and discussed together with the provisions to be taken on the territory to take into account, and minimize, the effects of the NPP on the environment and the public.

Site related issues affecting emergency preparedness and security will be covered.

The course will emphasize: the regulatory requirements, content of a regulatory safety guide for site safety analysis, content of documentation to be submitted to the NRA for evaluation, the regulatory licensing review and management process. Consideration will be given to the lessons learned from Fukushima event. Reference standards for all NPP siting aspects will be provided.

Two practical application sessions are included in the training program.



resources & energy

Course Daily Program

Monday 11 th May 2015	
08.30 - 09.00	Registration
9.00 – 12.45	Welcome Organizational aspects, Training objective, Training program
	EU infrastructure for Nuclear and Radiation Safety - <i>A. Madonna</i>
	Regulator's role and functions - <i>A. Madonna</i> Site analysis objectives & requirements - <i>A. Madonna , F. Zambardi</i>
12.45 – 14.00	Lunch
14.00 – 17.45	Approach for NPP site licensing - <i>R. Remetti, A. Madonna</i>
	Site radiological investigation and radiological impact from the NPP - <i>L. Katzarska</i>
	Environmental Impact Assessment for non radiological aspects and socioeconomics - <i>L. Katzarska</i>

Tuesday 12 th May 2015	
9.00 – 12.45	Radiation effects dose evaluation and representative individual - <i>R. Remetti</i>
	Introduction to NPP design site events (natural and non) - <i>F. Zambardi, G. Orsini</i>
	Analysis of site meteorological phenomena and extreme conditions - <i>M. C. Bramati</i>
	Flooding hazard analysis and definition of site DB flood - <i>M. C. Bramati</i>
12.45 – 14.00	Lunch
14.00 – 17.45	Tsunami hazard analysis and definition of site design basis - <i>V. Lucarelli</i>
	Aircraft crash - <i>G. Orsini, V. Lucarelli, D. Mazzini</i>
	External explosions - <i>G. Orsini, V. Lucarelli</i>

Wednesday 13 th May 2015	
9.00 – 12.45	Seismic Hazard Exclusionary and screening criteria - <i>E. Vittori</i>
	Deterministic and probabilistic seismic hazard analysis - <i>E. Vittori, R. Caporali</i>
	Summary of site events impact on design of the NPP and post Fukushima feedback - <i>G. Orsini, A. Pasculli</i>
12.45 – 14.00	Lunch
14.00 – 17.45	Practical application n. 1 - "Seismic Hazard"

Thursday 14 th May 2015	
9.00 – 12.45	Content of Regulatory Guide for NPP siting requirements - <i>G. Pino, A. Madonna</i>
	Content of documentation to be submitted for site approval - <i>G. Pino, E. Vittori</i>
	Regulatory licensing and safety related review – <i>R. Remetti, A. Madonna</i>
12.45 – 14.00	Lunch
14.00 – 17.45	Practical application n. 2 - "Radiological impact of the NPP"

Friday 15 th May 2015	
9.00 – 12.45	Emergency planning considerations during site analysis - <i>M. Gregoric</i>
	Security considerations during site analysis - <i>M. Gregoric</i>
	Public information and regulators' role - <i>K. Slavcheva</i>
12.45 – 14.00	Lunch
14.00 – 17.45	Course summary
	Questionnaire
	Opinion from trainees
	Training Minutes