



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”

TASK 2

Tutoring Module

on

**“Regulatory requirements and safety
evaluation of NPP SAR”**

November 20, 2017 – January 12, 2018

SNSA - Ljubljana

Tutoring Programme

draft

November 2017



**INSC Project MC3.01/13
EC Contract N° NSI/2014/343-969**

TASK 2

**“Tutoring in the area of Regulatory requirements and
safety evaluation of NPP SAR”**

Duration: November 20, 2017 – January 12, 2018

Venue: SNSA - Ljubljana

Contact persons from: SNSA – Mr. Andreja Persic (SNSA), Andreja.Persic@gov.si ; JSI - Mr. Prošek Andrej.Prosek@ijs.si

The tutoring activity has been conceived as “on the job training” at SNSA – Slovenian Nuclear Regulatory Authority in the area of regulatory requirements and safety evaluation of NPP SAR. It will contribute to a real and practical “build-up” of knowledge allowing a sustainable transfer of approaches and methods.

Tutoring objective and expected achievements

Transfer of a consolidate knowledge of content of SAR, regulatory review of SAR, regulatory evaluation of NPP safety during operation, management of design modifications, SAR updating and recent NPP safety re-assessment after Fukushima accident is the main objective of this tutoring.

Tutoring content:

The tutoring course will ensure an optimum transfer of know-how in the context of NRAs functions to define objectives, content and requirements for SAR and perform the review of the content, complementing the acquisition gained in the previous training course on “Requirements and safety evaluation of NPP SAR”.

The tutoring will include:

- Familiarization with the content of a SAR for NPP related regulatory requirements and applicable standards

- Regulatory management and licensing of plant safety related modification
- Regulatory approach to evaluate implementation of DiD
- Participation in regulatory-operator meeting to get evidence of the roles, approaches and needed dialog
- Participation to onsite inspections to get evidence of the complementarity between safety review and regulatory inspections.
- Analysis of operational experience.
- Regulatory management of periodic safety review
- Familiarization with action plan as defined for NPP in EU after the stress test

The tutoring will include onsite visits.

WEEKLY PROGRAM

Technical area & Presentation	Tutors
Part I – Safety Analysis Report	
Slovenian and international regulations and guidelines on the Safety Analysis Report (contents, format, requirements)	Andreja Peršič, Tomaž Nemeč
The Krško NPP Safety Analysis Report	
EU and IAEA requirements for licensing of nuclear facilities: WENRA products and use of them at SNSA: <ul style="list-style-type: none"> - WENRA Reference Levels, - Safety of the new NPP designs 	
Part II - Licensing	
Licence conditions and changes Graded approach Relation between licensee, regulatory body and TSO in the process of review and assessment and licensing	Andreja Peršič, Tomaž Nemeč
Role of TSOs in licensing process Role of public in licensing process The role of public in the process of regulation and guides preparation	
Participation to regulatory – operator meeting to get evidence of the roles, approaches and needed dialog Communications between SNSA and NPP during the licensing process	

<p>SNSA guidance documents for SAR and modifications review</p> <p>Modifications classification and their approval</p>	
<p>Practical work:</p> <ul style="list-style-type: none"> - Development of practical guidance on SAR review - Study of Slovenian and international legislation related to SAR, modifications and licensing - Review of modifications - Graded approach; review of international practices and requirements, US practice and implications, preparation of the examples about criteria how to use graded approach - Evaluation of implementation of DiD and independence among DiD levels 	
<p>Part III – Periodic Safety Review</p>	
<p>SNSA approach to the Periodic Safety Review: Definition, international practice, benefits</p> <p>PSR legislation in Slovenia, practical guidance</p>	<p>Davor Lovinčič</p>
<p>PSR1 program: Thematic report, Ranking, Action plan, Competition</p>	
<p>PSR2 program: Thematic reports, Ranking</p>	
<p>Practical work:</p> <ul style="list-style-type: none"> - Review and cooperation of PSR1 and PSR2 programs - Review and cooperation of PSR1 and 2 Ranking systems - Review of thematic reports like Emergency, Plant design and Actual condition of SSCs 	
<p>Part IV – Operational Experience</p>	
<p>Analysis of operational experience:</p> <ul style="list-style-type: none"> - Slovenian regulations, - SNSA operating experience feedback (OEF) procedure, 	<p>Davor Lovinčič</p>
<p>Trending of low level events and near misses to enhance safety performance in nuclear power plants (IAEA-TECDOC-1477)</p> <p>Counterfeit/Suspect/Fraudulent Items (CSFI)</p>	
<p>Construction & Operational Experience Feedback Programme Benchmarking Plan</p>	
<p>Safety operation indicators system at SNSA</p>	
<p>Practical Work (Safety Indicators)</p>	
<p>Practical Work (Event Analysis)</p>	

Part V – Technical Support Organization	
One week visit to Jožef Stefan Institute comprising: <ul style="list-style-type: none"> - role of the TSO (from the TSO perspective), - review and assessment performed by the TSO, - tools and methods applied by the TSO in SAR review, - details about their current activities as a TSO. 	Andrej Prošek
Part VI - Inspection	
Inspection annual plan and procedures with the emphasis on the NPP inspection	Aleš Janežič
Preparation of inspectors, their duties and tools	
Inspection during outage and the role of TSOs during outage	
Inspection of the NPP together with the inspectors	
Licensing of NPP operators	
Part VII – Safety Upgrades	
EU stress tests and peer review	Siniša Cimeša
Safety upgrade program of the Krško NPP	
National action plan	
Details about already approved and forthcoming safety upgrade modifications in the Krško NPP	
Part VIII – General Issues	
SNSA Management System	Polona Tavčar, Michel
Emergency Preparedness – Role of the Accident Assessment Group	Cindro
Radioactive Waste Management	
Radiological Effluents from the NPP (monitoring programme, limits, inspection)	
NPP Siting (legal requirements, steps of the siting process)	

At the end of the Tutoring Module the Tutees will elaborate a common Report containing the following:

- **INTRODUCTION**
- **TUTORING OBJECTIVE**
- **TUTORING PROGRAM**
- **ACTIVITIES PERFORMED**
- **MAIN RESULTS**
- **CONCLUSIONS**
