



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

“Safety evaluation, licensing and oversight of NPP during design and construction”

July 25th – August 19th, 2016

TÜV SÜD ET – Germany

Tutoring Programme

Rev. 1

August 2016



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

TASK 2

**“Safety evaluation, licensing and oversight of NPP
during design and construction”**

Duration: 1 month - July 25th – August 19th, 2016

Venue: TÜV SÜD ET - Germany

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The tutoring activity has been conceived as “on the job training” at TÜV SÜD ET – Germany in the area of “Safety evaluation licensing and oversight of NPP during design and construction”.

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

The key aspects of safety evaluation licensing and oversight of NPP during design and construction are the main objectives of this tutoring.

Tutoring content:

The tutoring module (1 month for 2 tutees) is organized starting soon after the one week training at TÜV SÜD ET on the topic “Regulatory inspections (oversight) during siting and construction phases”.

It will cover the area of regulatory licensing review of design of a NPP with respect to siting and construction licensing phases and includes site walk down and acquisition of regulatory inspection finding getting evidence of the complementarity between regulatory safety review and regulatory inspections.

The course will provide direct knowledge of regulator’s needed technical competences and licensing management capability during design, siting and construction phases.



Familiarization with objective and scope of regulatory safety evaluation for construction license and management of interfaces between regulator and applicant and between regulator and external technical support, will be provided. The tutoring will include onsite visits as far as possible.

The tutoring will include:

- Familiarization with regulatory evaluation
- Familiarization with management of interface with the licensee
- Design phase of a NPP New Build Project
- Siting phase of a NPP New Build Project
- Construction phase of a NPP New Build Project
- Pre-operation phase of a NPP New Build Project
- Onsite visits will be organized as far as possible.

WEEKLY PROGRAM

Technical area & Presentation	Tutors
Part I – Design Phase of a NPP New Build Project	
GDA (Generic Design Assessment)	Dr. Dagmar Baumann, Dr. Jeanne Venker, Sinan Özdür, Carsten Janning, Thomas Jesberger
Reactor type, type-specific hazards, basic plant layout	
Aspects related to licensing	
Onsite visit: component inspection in NPP one (if possible)	
Part II – Siting Phase of a NPP New Build Project	
SAR (Safety Analyses Report)	Dr. Dagmar Baumann, Dr. Jeanne Venker, Sinan Özdür, Carsten Janning, Dr. Oliver Bauer, Claus Mallinger, Jörg Müller, Andreas Löwe, Reinhold Göhner
Natural environment, infrastructure, population	
Natural and man-made hazards	
Aspects related to licensing	
Onsite visit: build of waste treatment and storage facility on the site of a decommissioned NPP (if possible)	
Part III – Construction Phase of a NPP New Build Project	
Erection of main structures	Claus Mallinger, Jörg Müller, Andreas Löwe, Reinhold Göhner
Installation of main components	
Aspects related to licensing	
Onsite visit: pre-installation component testing (if possible)	
Part IV – Pre-operation Phase of a NPP New Build Project	
Testing and commissioning of components	Anni Schulze, Sinan Özdür, Renate Seidler, Dr. Dietmar Göck, Claus Mallinger, Jörg Müller, Andreas Löwe, Reinhold Göhner, Kai Klahn
Manufacturing of components off-site and transport and installation	
Final tests before introduction of fissile material	
Aspects related to licensing	
Onsite visit: component inspection in a NPP two (if possible)	

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**

The Tutees Report will be agreed with the main tutoring coordinator.
