



## **INSC Project MC.03/10**

**Training and Tutoring for expert of the NRAs and their TSOs for developing or strengthening their regulatory and technical capabilities**

### **LOT 1**

#### **Tutoring Module N. 1**

“Inspection and regulatory project management for a new build”

28 October – 22 November, 2013

c/o STUK - Helsinki

### **Tutoring Programme**

*September 2013*

## TUTORING ON “INSPECTION AND REGULATORY PROJECT MANAGEMENT FOR A NEW BUILD” – A TUTORING PROGRAMME

**STUK in Helsinki, 28 October - 22 November 2013**

**Objective:** An individual tutoring programme for qualification and initial training is provided for a regulatory inspector aiming to work for a new NPP project management. The Tutoring plan consists of :

- one week Introduction on “Safety and regulation of nuclear power plants - regulatory project management for a new build”  
and
- successive three weeks individual tutoring programme as presented below.

The tutoring plan presents sub-areas for an Introduction and individual tutoring. Tutor prepares individual tutoring topics and content in each subarea. A tutee is familiarized with the regulatory practices for project management and inspection programme for a new build. The application of guides, standards and regulatory documents is covered. Tutoring is implemented through discussions and on the job training with the tutor and more experienced colleagues and by self study of documentation.

### **Time and place:**

28 October - 22 November 2013, STUK, Helsinki

**Organization:** Training and tutoring is organized by the Radiation and Nuclear Safety Authority (STUK). The tutors and experts are from STUK.

**Language:** All presentations and discussions are carried out in English.

### **Outline of the tutoring plan:**

(individual qualification and initial training plan)

Tutoring plan consists of the following subareas:

- One week Introduction (28-31 October) on NPP project management
- Three weeks individual tutoring programme (1-22 November) including
  - Introductory familiarization training for project management
  - Familiarization with legislation and regulatory guidance
  - Familiarization with other guidelines and standards
  - Familiarization with regulatory documentation
  - Onsite training
  - Inspection and enforcement
  - Assessment of safety
  - Other regulatory duties and tasks
  - Technical skills training issues
  - Certification and records
- Exercise to prepare corresponding internal draft regulatory guidance documents for home organization

### Further information:

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**More detailed schedule and content:** See attachment.

### Schedule

**First week:** Introduction on “Safety and regulation of nuclear power plants - regulatory project management for a new build” (overview of main topics will be covered during the training course.)

**Schedule for weeks 2 – 4** contains daily 2 hour familiarization discussions and answering questions sessions in most days. Some days contain full day participation in guided activities. The following programme is indicative and is tailored according to individual needs and ongoing activities.

#### Second week:

**Monday (whole day):** Familiarization discussions and planning the tutoring programme details according to individual needs. Presentation and familiarization to STUK. (Ilari Aro)

**Tuesday (9:00-10:00):** Familiarization with the project organization and organisational unit for project management and its facilities and equipment and main working methods will be provided. Familiarization with the project management and QM related documents and practices. Specifically, YTV-guide (in English) on project management will be presented. This is a key tool for project management and the aim is that similar will be drafted during the last week for participating organization. (Janne Nevalainen)

**Wednesday (9:00-10:00 and 15:00–16:00):** Presentation of STUK’s NPP project management plan and a draft guide YVL A.5 on the construction activities. (Tapani Virolainen)

**Thursday (9:00-10:00 and 15:00–16:00):** Familiarization with legislation and regulatory guidance will be provided. Specific regulations, regulatory guides and standards affecting the work of the project management unit have been selected for a detailed study including Guide YVL 1.1 on STUK regulatory supervision. (Aro)

**Friday (9:00-11:00 and 15:00–16:00):** Answering questions in relation to internal YTV-guide on project management. And continuing discussions on the topic covering e.g. IAEA DS 441 contents (Construction of nuclear installations). (Nevalainen)

#### Third week:

**Monday (11:30-16:45)** Presentations on Finnish practices on severe accident management to show one national example (Risto Sairanen et al)

**Tuesday (13:00-15:00):** Presentation of the structure of Environmental Impact Assessment Reports and practices in Finland. Presentation of Decision in Principle process for the first license from the government and the documents generated by the regulatory body during the authorization process. Specific documents generated by the regulatory body during the authorization process have been selected for a detailed study. Materials: STUK’s statements and safety assessment of

new NPPs in EIA and DiP phases, YTV 4.1.1, and STUK's IRRS self-assessment in module 5 (Authorisation) (Nevalainen)

**Wednesday (9:00-11:00):** Construction and Operating Licenses and related regulatory processes including NPP Safety Analysis Report and other relevant licensing documentation. Most important project management and QM routines and STUK's safety assessments. Materials: STUK's safety assessment in CL phase, project management plan for operating licence phase, YTV 4.1.1, and STUK's IRRS self-assessment in module 5 (Authorisation) (Kirsi Alm-Lytz)

**Thursday (9:00-10:00 and 15:00-16:00):** Presentation of inspection programme for construction and discussion on the implementation. Inspection guidance, preparation, implementation, and reporting of inspection, handling of inspection findings will be provided. Materials: YTV 4.6.1 and STUK's IRRS self-assessment in module 7 (Inspection) (T.Virolainen)

**Friday (9:00-10:00 and 15:00-16:00):** Presentation and discussion on the inspection practices of mechanical equipment (documents and inspections) Materials: STUK's safety assessment in CL phase, case study examples during construction phase, and STUK's IRRS self-assessment in module 7 (Inspection) (Mark Cederberg)

**Sunday:** Travel to Pori to Hotel Cumulus-Pori starting from Helsinki bus station.

#### **Fourth week:**

**Monday (8:30-16:00):** Pick-up from the hotel at 7:30. Presentation of the resident inspectors duties including inspection guidance, preparation, implementation, and reporting of inspection, handling of inspection findings will be provided. Specific internal guides and reference materials have been selected for a detailed study. Organize participation in an inspection with senior inspectors to illustrate the use of internal guidance and inspection methods. Preparation for inspection is familiarized. (Lasse Kuosa)

**Tuesday (8:30-16:00):** Programme at Olkiluoto site continues. (Lasse Kuosa)

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Travel to Helsinki from Pori bus station

**Thursday (9:00-10:00 and 15:00-16:00):** Presentation of assessment practices from the point of view of inspector's duties (review of deterministic safety analyses). Familiarization with the TSO support and their tools and methods and working practices with the regulatory body. Materials: YTV 4.3.1, STUK's safety assessment in CL phase, and STUK's IRRS self-assessment in module 6 (Review and assessment) (Risto Sairanen)

**Friday (9:00-11:00):** Presentation of the specific methods for PSA used in the assessment work such as computer codes available e.g. FINPSA etc. Familiarization with the computational methods used in safety analysis is provided. Materials: YTV 4.3.2, STUK's safety assessment of OL3 phase, and STUK's IRRS self-assessment in module 6 (Review and assessment) (Ari Julin)

**14:00-16:00** Final tutoring discussion and evaluation of OJT. Certification if needed. (NN)