

Technical Meeting on Quality Assurance and Quality Control Activities as Part of a Nuclear Power Plant Management System: Lessons Learned and Good Practices

IAEA Headquarters Vienna, Austria

12–15 November 2018

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Information Sheet

A. Background

The safety standards issued by the International Atomic Energy Agency (IAEA) reflect an international consensus on what constitutes a high level of safety for protecting people and the environment. They often serve as the basis for nuclear safety regulatory documents, and are incorporated in Member States' national nuclear regulations. The IAEA Safety Requirements publication *Leadership and Management for Safety* (IAEA Safety Standards Series No. GSR Part 2) was issued in June 2016.

Proper management and leadership are vital to achieve quality also in areas outside safety. The IAEA safety standards are complemented by industry management and quality standards, and all facilities and activities need to be implemented within an appropriate national regulatory infrastructure. A number of national and international quality assurance/management standards/regulations are being used in the nuclear industry to complement the IAEA Safety Requirements, such as ISO 9001, ASME NQA-1, CSA N-286, NP-011-99, HAF-003, YVL A.3, etc. Also, there is a new ISO 19443 standard for items important to nuclear safety.

In recent years, the construction and operation of nuclear facilities and activities have been impacted by significant supply chain related concerns. Common new challenges include a shortage of skilled suppliers and contractors, the shrinking amount of manufacturing bases, increased length of the supply

chain, shortened product life cycles, emerging new materials, advances in information technology, new technological processes and standards, and the globalization of the supply sources. There have been temporary shutdowns of nuclear power plants (NPPs) due to the installation of counterfeit, fraudulent or substandard items, as well as issues related to increased reliance on digital equipment and components containing software, computer security and oversight of the global nuclear supply chain. All suppliers need to comply with well-established requirements, and have a pool of their own suppliers and subcontractors who are able to supply sub-assemblies.

B. Objectives

The purpose of the meeting is to provide an international forum for specialists to exchange experiences related to the challenges in implementing requirements regarding quality management, quality assurance and quality control activities at nuclear facilities, including oversight of the supply chain (manufactured products and services). The participants will also discuss how to integrate such requirements with the different standards that may apply in their respective organizations, consider practical solutions to overcome those challenges throughout the life cycle of a facility, and advise the IAEA on the need for further work in this area.

It is also planned that a new IAEA Technical Document (TECDOC) in the area of quality assurance and control will be presented to the participants of this meeting for review.

C. Target Audience

The meeting is intended for representatives of Member States with an operating NPP or other operating nuclear facility, and of Member States that are either building an NPP or are in an advanced planning phase for construction of a plant, as well as for individuals from international organizations involved in the development and/or promotion of quality, management and supply chain management related documents and activities.

Participants may be e.g. senior managers in charge of developing, implementing and improving quality control and quality assurance activities at their facilities; specialists from regulatory bodies who are in charge of the review and assessment of their organizations', operators' or suppliers' quality management; representatives of engineering, procurement, manufacturing and construction contractors; and responsible staff of the suppliers of products and services. Officers from international and non-governmental organizations that are involved in the development or promotion of quality standards or supply chain sustainability may also find useful participate.

The participants are requested to prepare a presentation on challenges, practical solutions and lessons learned in the application of different quality control/quality assurance standards in the nuclear industry. The proposed presentations, or an extended outline of these, should be sent to the Scientific Secretary, Mr Pekka Pyy (see contact details in Section J below), for review and incorporation into the meeting agenda not later than **5 September 2018**.

D. Topics

The topics to be addressed and discussed during the meeting include good practices and challenges in implementing quality and management standards in the nuclear industry or in managing the supply, practical solutions to overcome those challenges, and lessons learned about quality assurance and quality control and supplier oversight.

Some specific examples are given below:

- Application of quality assurance and quality control to safety, security, human resources, environmental and economic requirements in different life cycle phases.
- Oversight and management of supply of products and services.
- Implementation of IAEA requirements and guidance together with inter-/national standards.
- Presentations on established quality management standards, including comparison and harmonization of regulations with national and international standards.
- Problems experienced with the supply chain and solutions to these.
- Managing service contractors.
- Application of quality assurance and quality control to project management and in the supply chain.
- Needs for future IAEA work in this area.

The life cycle phases of a nuclear facility to be covered are project development/design, construction, commissioning and operation.

E. Working Language

The meeting will be conducted in English. No interpretation will be provided.

F. Administrative and Financial Arrangements

Designating Governments will be informed in due course of the names of the selected candidates and will at that time be given full details on the procedures to be followed with regard to administrative and financial matters.

No registration fee will be charged to participants. The costs of the meeting, including the meeting facilities and logistic support for the meeting, are to be borne by the IAEA. Travel and subsistence expenses of participants may be borne by the IAEA utilizing the limited funds that are available to help cover the cost of certain participants. Upon specific request, such assistance can be offered to normally one participant per country provided that, in the IAEA's view, the participant will make an important contribution to the meeting. **The application for financial support should be made at the time of designating the participant**.

It should be noted that compensation is not payable by the IAEA for any damage to or loss of personal property. The IAEA also does not provide health insurance coverage for participants in IAEA events or for consultants. Arrangements for private insurance coverage on an individual basis should therefore be made. The IAEA will, however, provide insurance coverage for accidents and illnesses that clearly result from any work performed for the IAEA.

G. Application Procedure

Designations should be submitted using the attached Participation Form (Form A). In case the designated participant wishes to give a presentation, this should also be indicated on the Participation Form together with the suggested title, and a synopsis of less than 200 words should follow the designation.

Completed forms should be endorsed by the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) and returned through the established official channels. They must be received by the IAEA not later than **5 September 2018**. Designations received after that date or applications sent directly by individuals or by private institutions cannot be considered. Designating Governments will be informed in due course of the names of the selected candidates and at that time full details will be given on the procedures to be followed with regard to administrative and financial matters.

For Member States receiving financial assistance through technical cooperation funds, applications for financial support should be made at the time of designating the participant.

H. Visas

Participants will be required to enter Austria and should submit the necessary visa application to the nearest diplomatic or consular representative of the Austria as soon as possible.

I. Local Arrangements

The meeting will be held at the IAEA's Headquarters in Vienna, Austria, specifically in Board Room C, C Building, of the Vienna International Centre (VIC) — and will start on Monday, 12 November 2018, at 10:00 and is tentatively planned to end by 14:00 on Thursday, 15 November 2018. Participants are kindly requested to be at the venue at least an hour before the meeting starts, to allow adequate time for registration. Participants should bring some form of personal identification, such as a national passport, in order to identify themselves to the Security Officers at Checkpoint 1/Gate 1 of the VIC.

J. Organization

Scientific Secretary:

Mr Pekka Pyy

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Administrative Secretary:

Ms Olga Glöckler

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretary and correspondence on other matters related to the meeting to the Administrative Secretary.