

Webinar Series on Small Modular Reactor (SMR) Regulators' Forum Phase 3 Reports

Manufacturing, Construction, Commissioning and Operations (MCCO) Working Group

5 April 2024

13:00 – 14:30 Central European Time (UTC+01:00)

Ref. No.: EVT2306960

Information Sheet

Background

The <u>SMR Regulators</u>' Forum (<u>SMR RF</u>) was formed in 2014 as a response to the explicit interest expressed by a number of IAEA Member States to evaluate and discuss the benefits of forming a regulator-to-regulator entity driven by its Members that would specifically address regulatory issues related to SMRs. Currently, the Forum has 11 Members, and, since its foundation, it has completed three sequential phases with relevant outcomes:

- a Pilot Phase, conducted from March 2015 to May 2017, with the objective of addressing different issues (Graded Approach, Defence-in-Depth and Emergency Planning Zone Size) for both lightwater and non-light-water SMR designs;
- Phase 2, conducted from May 2017 to December 2020, was developed by 3 Working Groups on: Licensing issues; Design and Safety Analysis (DSA); and Manufacturing, Commissioning and Operations (MCCO); and
- Phase 3, conducted from January 2021 to December 2023, that covered issues that are the focus of this Webinar Series.

The scope of the Forum is, based on shared regulatory experience among Forum Members, to identify, enhance understanding of, and address key regulatory challenges that may emerge in future SMR regulatory and licensing discussions and, if possible, to develop and recommend common regulatory positions. This effort is expected to help enhance safety and efficiency in SMR regulation, including licensing, and to enable regulators to consider changes, if necessary, to their requirements and regulatory practices.

The IAEA serves as the Scientific Secretariat for the SMR RF, appointed by the Regulatory Activities Section (RAS) of the Division of Nuclear Installation Safety (NSNI). The Scientific Secretariat has, among others, the responsibility to promote the Forum, its activities and outputs, and to support the SMR RF Steering Committee and Working Groups (WGs) in achieving the Forum's objectives.

Overall, the IAEA provides webinar series for Member States considering the possibility of introducing nuclear power as part of their energy mix. Through these webinars, the IAEA provides a platform for sharing Member States' experiences and lessons learned from developing nuclear power programmes in compliance with nuclear safety requirements and recommendations.

This particular webinar series is implemented with the aim to disseminate the main findings of the SMR RF WGs in line with the Forum's objective of sharing SMR regulatory knowledge and experience among its Members and with other stakeholders.

Objectives

The webinar's objective is to present the key challenges identified, and main common positions developed, by the SMR RF Working Group on Manufacturing, Construction, Commissioning, and Operations (MCCO) during Phase 3 addressing the following:

- how Long Lead Items (LLI) for SMRs (including non-light water reactors) may differ from traditional LLI, and the foreseeable regulatory challenges introduced by these differences; and
- the conduct of authorised activities and their impact on stakeholders' organisational capabilities
 associated with smaller Licensee organisations. This will include consideration as to whether a
 vendor needs a larger organisation to compensate for the lack of knowledge from a possibly less
 knowledgeable Licensee.

Scope

This webinar is mostly based on the SMR Regulators' Forum Phase 3 reports produced by its MCCO Working Group: "Regulatory Considerations in Pre-Licensing Engagement for Long-Lead Requests and Items (LLI)" and "Conduct of Authorised Activities: Impact on Stakeholders' Organisational Capabilities (Designers, Vendors, Manufacturers, Supply Chains, Operators)". It will introduce the SMR Regulators' Forum, its Working Groups and activities, and will focus on the main content and key considerations of the above reports.

Speakers

• Opening Remarks:

Mr Brian Smith Director of the Division of New and Renewed Licenses Office of Nuclear Reactor Regulation US Nuclear Regulatory Commission (USNRC)

• Regulatory Considerations in Pre-Licensing Engagement for Long-Lead Requests and Items (LLI)

Ms Kerri Kavanagh Chief, Quality Assurance and Vendor Inspection Branch Division of Reactor Oversight Office of Nuclear Reactor Regulation US Nuclear Regulatory Commission (USNRC)

• Conduct of Authorised Activities: Impact on Stakeholders' Organisational Capabilities (Designers, Vendors, Manufacturers, Supply Chains, Operators)

Ms Kerri Kavanagh Chief, Quality Assurance and Vendor Inspection Branch Division of Reactor Oversight Office of Nuclear Reactor Regulation US Nuclear Regulatory Commission (USNRC)

Expected Outcomes

The expected outcomes of the webinar include:

- increasing awareness among the IAEA Member States of challenges and common positions identified by the MCCO Working Group of the SMR Regulators' Forum in regulating SMR during Phase 3;
- sharing of experiences and lessons learned with the IAEA Member States' regulatory bodies; and
- enhancing knowledge of the IAEA and SMR Regulators' Forum, its activities and outputs.

Target audiences

This webinar is open to experts from the SMR RF Members (including Observers), participants from the IAEA Member States interested in SMR as well as a wider general public wishing to have a better understanding of this topic.

Working Language

English.

Participation and Registration

The participation will be approved through an online registration:

Organization

The event will be held virtually via WebEx on 5 April 2024 at 13:00 Central European Time (UTC+01:00).

SMR Regulators' Forum Scientific Secretary

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Annexes

• Annex I – Agenda

Annex I – Agenda

	Topic	Presenter
13h00 – 13h15	Opening remarks, introduction of the SMR Regulators' Forum	Mr B. Smith
13h15 – 13h40	Regulatory Considerations in Pre-Licensing Engagement for Long- Lead Requests and Items (LLI)	Ms K. Kavanagh
13h40 – 14h05	Conduct of Authorised Activities: Impact on Stakeholders' Organisational Capabilities (Designers, Vendors, Manufacturers, Supply Chains, Operators)	
14h05 – 14h30	Questions and Answers	All