



Technical Meeting on Decision-Making for Sustaining Operational Excellence in Nuclear Power Plant Operating Organizations

IAEA Headquarters, Vienna, Austria
and virtual participation via Cisco Webex

5-8 November 2024

Ref. No.: EVT2303089

Information Sheet

Introduction

Nuclear electricity generation has faced critical economic challenges under competitive electricity markets and difficulties in continuously taking a role as a stable energy source. As a result, nuclear power plant (NPP) owner/operator organizations now need to re-evaluate and re-establish their business model to become more robust and resilient so that nuclear power plants sustain operational excellence and fulfil its expected role in decarbonization and energy security.

Under these circumstances, IAEA-Nuclear Energy Department (NE) has been continuously making efforts for supporting sustainable excellent performance of NPPs by considering the recommendations from the advisory group, the Technical Working Group on Nuclear Power Plant Operations (TWG-NPPOPS), the IAEA NE Nuclear Energy Series publication "Sustaining Operational excellence at Nuclear Power Plants – Principles and Challenges" (NR-

G-3.1) was developed and published in December 2022. The IAEA TECDOC Series on "Institutional Strength in Depth in the Nuclear Industry to Sustain Operational Excellence" was also published in December 2023. Several other technical documents in the areas of Maintenance, Work Management and Resilience are also being drafted.

During the development of these publications, it was repeatedly discussed that timely and effective decision-making is one of the critical factors needed to sustain operational excellence, be it about design, process, emergency action, or other areas. It was also understood that strategic and tactical decision-makings were not necessarily guided by existing publications well, while some existing ones in the nuclear industry provide good guidance for operational decision-makings on the daily or short-term basis. More specifically, the needs of practical guidance for senior management of owner/operating organizations of NPPs were highlighted for:

- Making decision under large uncertainties that might be difficult to be based on sufficient data and analysis because of rapid changes of situations, characteristics of hazards and/or for inevitable reasons;
- Evaluating cost-effectiveness and value of investment to enhance safety and improve performance;
- Achieving objective judgement by gaining critical and diverse views and avoiding any influence of organizational, leadership and cultural elements and external factors including economic, societal, political and environmental aspects;
- Collecting necessary data and information for decision-making systematically

Therefore, developing a technical document that discusses processes, mechanisms, tools and technics for the best decision-making within NPP owner/operating organizations considering these needs is deemed valuable.

The discussions in the document mainly focus on high-level **strategic and tactical decision-making** to sustain long-term operational excellence and does not include daily or short-term decision-making related to plant operation. In order to enhance these discussions, examples and experience of practical tools, processes and frameworks can be provided by Member States and shared in the document.

Objectives

The purpose of the event is to provide a forum for Member States with operating (or soon-to-be operating) nuclear power plants to share good practices, experience and lessons learned in strategic and tactical decision making, including relevant processes, mechanisms, tools and techniques. Considerations related to organizational, leadership and cultural elements and external factors such as economic, societal, political and environmental aspects that might influence decision making will also be discussed.

The event will provide an opportunity for Members States to review and provide feedback on the draft IAEA Technical Document entitled *Decision-Making for Sustaining Operational Excellence in Nuclear Power Plant Operating Organizations*.

Topics

The topics to be discussed and that are expected to be presented by the participants in this event include:

- Considerations in decision-making process, such as:
 - Psychological traps and biases
 - Listening to diverse views and options
 - Use of checklists

- Cases under high uncertainties and/or time pressure
- Use of integrated risk informed decision-making
- Organizational, leadership, cultural and external factors influencing decisions, such as:
 - Organizational structure and location of decision authority
 - Organizational culture and traits
 - Leadership
 - Critical review or oversight mechanism including independent oversight, design authority, etc.
 - Involvement and close communications with key stakeholders such as vendors, supply chains, regulators, policy makers etc.
 - Socio-economic impact
 - Advanced technologies like artificial intelligence
- Required decision makers' competencies and capabilities.

Target Audience

The meeting is targeted mainly at senior leaders and managers of NPP owner/operating organizations, who are directly responsible for **strategic and tactical decision-makings** related to plant safety and performance. Nuclear industrial associations such as WANO, INPO, NEI, OECD/NEA, Nucleareurope, European Commission and EPRI are also targeted as their activities to support plant operation and management are associated with decision-making in them.

Manufacturers, vendors and contractors would also benefit from this meeting as it would help them to better understand the needs and challenges faced by NPP owner/operator organizations and to make associated decisions as appropriate in their organizations.

Although the decision-making processes by the regulatory body, government and NPP owner/operating organization on plant operation and management is independent of each other, the practice of transparency and informative interface between them is essential in the activities towards decision making for better plant performance. Therefore, this meeting could also be beneficial for participants from the regulatory bodies and governments.

Participants will be asked to discuss the topics listed above and make presentations on their experience, good practices and lessons learned in decision making in their organizations, as well as the needs and challenges faced by themselves. Therefore, they should be knowledgeable and experienced in industry-wide operational practices, rules and regulations, as well as in their implementation with respect to plant operation and management.

Participants will be also asked to make comments and provide perspectives on the above-mentioned draft IAEA technical document on Decision-Making for Sustaining Operational Excellence in NPP operating organizations.

Working Language(s)

English.

Participation and Registration

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State or invited organization, participants are requested to submit their application via the InTouch+ platform (<https://intouchplus.iaea.org>) to the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or organization for onward transmission to the IAEA by **2 September 2024**, following the registration procedure in InTouch+:

1. Access the InTouch+ platform (<https://intouchplus.iaea.org>):
 - Persons with an existing NUCLEUS account can sign in to the platform with their username and password;
 - Persons without an existing NUCLEUS account can register [here](#).
2. Once signed in, prospective participants can use the InTouch+ platform to:
 - Complete or update their personal details under ‘Complete Profile’ and upload the relevant supporting documents;
 - Search for the relevant event under the ‘My Eligible Events’ tab;
 - Select the Member State or invited organization they want to represent from the drop-down menu entitled ‘Designating Authority’ (if an invited organization is not listed, please contact InTouchPlus.Contact-Point@iaea.org);
 - If applicable, indicate whether financial support is requested and complete the relevant information (this is not applicable to participants from invited organizations);
 - Based on the data input, the InTouch+ platform will automatically generate the Participation Form (Form A) and/or the Grant Application Form (Form C);
 - Submit their application.

Once submitted through the InTouch+ platform, the application, together with the auto-generated form(s), will be transmitted automatically to the required authority for approval. If approved, the application, together with the applicable form(s), will automatically be sent to the IAEA through the online platform.

NOTE: The application for financial support should be made, together with the submission of the application, by **2 September 2024**.

For additional information on how to apply for an event, please refer to the [InTouch+ Help](#) page. Any other issues or queries related to InTouch+ can be sent to InTouchPlus.Contact-Point@iaea.org.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and financial matters.

Participants are hereby informed that the personal data they submit will be processed in line with the [Agency’s Personal Data and Privacy Policy](#) and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. The IAEA may also use the contact details of Applicants to inform them of the IAEA’s scientific and technical publications,

or the latest employment opportunities and current open vacancies at the IAEA. These secondary purposes are consistent with the IAEA's mandate. Further information can be found in the [Data Processing Notice](#) concerning the IAEA InTouch+ platform.

Expenditures and Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the event. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the event.

The application for financial support should be made, together with the submission of the application, by **2 September 2024**.

Venue

The event will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. Participants must make their own travel and accommodation arrangements.

General information on the VIC and other practical details, such as a list of hotels offering a reduced rate for IAEA participants, are listed on the following IAEA web page:

www.iaea.org/events.

Participants are advised to arrive at Checkpoint 1/Gate 1 of the VIC one hour before the start of the event on the first day in order to allow for timely registration. Participants will need to present an official photo identification document in order to be admitted to the VIC premises.

The virtual component of the event will be held via WebEx from 5 to 8 November 2024.

Visas

Participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria at least four weeks before they travel to Austria. Since Austria is a Schengen State, persons requiring a visa will have to apply for a Schengen visa. In States where Austria has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Austria in the country in question.

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

Event Web Page

Please visit the following IAEA web page regularly for new information regarding this event:

[Technical Meeting on on Effective Decision Making to Sustain Operational Excellence in Nuclear Power Plant Operating Organizations | IAEA](#)