

International Conference on Enhancing the Operational Safety of Nuclear Power Plants

Organized by the

International Atomic Energy Agency (IAEA)

Hosted by the

Government of China

through the

China Nuclear Energy Association

Beijing, China

15 to 19 April 2024

Announcement and Call for Papers

A. Introduction

Ensuring the safe, secure, efficient and reliable long term operation of nuclear power plants (NPPs) is the main priority for all those involved in the nuclear industry. Both new and existing power plants need to be operated by skilled, trained and competent personnel and led by effective leaders.

NPP owners and operators face the challenge of maintaining the highest standards of safety while striving to improve plant performance through technical and organizational changes, such as plant modernization, improved life management, power upgrades and outage optimization.

The conference will highlight enhancements in operational safety management at all stages of NPP operations from new build, existing and extended life operations.

B. Objectives

The aim of the conference is to foster the exchange of information and experiences related to enhancing NPP operational safety during commissioning, start-up, ongoing operations and long term operations among representatives of new and existing nuclear operators, regulators, technical support organizations, construction companies and other like-minded organizations.

Specifically, the conference aims to:

- Describe the leader's role in enhancing safe operations & establishing a positive safety culture;
- Discuss opportunities and lessons learned from new NPP construction and commissioning;
- Present case studies for monitoring and enhancing the operational safety performance of NPPs;
- Discuss the role of corporate oversight in maintaining and enhancing operational safety throughout the lifecycle of nuclear power plants;
- Discuss the lessons learnt from the long term operation of NPPs, including ageing management and the development activities needed to define the limiting factors for plant life extension;
- Examine the importance of operating experience feedback for the enhancement of operational safety;
- Address the various challenges faced by new operators and existing NPP operators that are extending their fleets or restarting units, including human resource management, regulatory requirements, knowledge transfer to new staff, equipment performance monitoring and safety culture.

C. Format and Topics

The conference will comprise an opening plenary session, six topical sessions and a closing plenary session.

The conference will feature:

- Presentations by invited keynote speakers;
- Topical presentations by conference participants;
- Poster presentations on state-of-the-art and knowledge-related information; and
- Panel sessions featuring question and answer discussions.

Authors of papers are encouraged to cover several topical areas, where appropriate.

Session 1: Leadership and Safety Culture — Striving for Excellence

Contributions are sought on the following topics:

- Developing future safety conscious leaders;
- Enhancing operational safety;
- Creating an effective nuclear safety culture;
- Coaching operational staff to improve plant performance; and
- Delivering nuclear safety improvements.

Session 2: New Build — Challenges and Opportunities

Contributions are sought on the following topics:

- Ensuring an effective transition from construction to operation while minimising safety related events;
- Knowledge transfer between existing plants and new units within a fleet maintaining a safety focused competent workforce;
- Nuclear safety focused pre-operational planning;
- Pre-operational lessons how we can do better next time; and
- Industry assistance for new and embarking organizations.

Session 3: Operational Performance Improvements — Getting Better at What We Do

Contributions are sought on the following topics:

- How to monitor and review operational safety performance;
- Operator fundamentals;
- Operational performance improvements case studies focused on enhancing nuclear safety performance;

- Maintaining the focus on nuclear and industrial safety; and
- The role of regulators in operational performance improvements.

Session 4: Corporate Oversight — Influencing Behaviours

Contributions are sought on the following topics:

- Corporate oversight challenges and opportunities;
- Independent oversight how to be effective in ensuring a nuclear safety focused workforce;
- Measuring fleet safety and operational performance;
- Strengthening stakeholder-regulator-corporate-plant relationships; and
- Managing organizational change and its impact on nuclear safety.

Session 5: Long Term Operations — Extended Operations

Contributions are sought on the following topics:

- Plant life extensions case studies focused on maintaining and enhancing nuclear safety throughout the lifecycle of nuclear power plants;
- Development activities needed to define the limiting safety factors for plant life extension;
- Ageing management programmes; and
- The role of periodic safety reviews in long term operation;

Session 6: Operating Experience — Completing the Learning Cycle

Contributions are sought on the following topics:

- Nuclear and non-nuclear operating experience programmes;
- Human performance error reduction strategies;
- Developing and enhancing a learning culture;
- Event analysis techniques ensuring the identification of the root cause(s) of nuclear safety related events are clearly identified;
- Capturing and using lessons from event analysis to prevent repeat safety related events; and
- Measuring corrective action effectiveness.

Closing Session

The closing session will include a panel discussion to summarize the principal observations made and issues raised during the conference. The conference rapporteur and the session chairs will present summaries and highlights of session discussions, as well as conclusions and recommendations from the conference.

D. Target Audience

The conference is intended for representatives of existing and new nuclear operators, regulators, technical support organizations, construction companies and other like-minded organizations. It will provide a platform for participants to learn from each other's experiences in the safe, efficient and reliable operation of NPPs worldwide.

E. Papers and Proceedings

Concise papers on the topics outlined in Section C may be submitted as contributions to the conference. All papers, apart from invited papers, must present original work and should not have been published elsewhere.

(a) Submission of extended synopses

Anyone wishing to present a paper at the conference is requested to first submit an extended synopsis of between 600 and 800 words (not exceeding two pages, including figures, tables and references) in electronic format. The extended synopsis should give enough information on the contents of the proposed paper to enable the Programme Committee to evaluate it. Introductory and general matters should not be included. Authors should state which topic outlined in Section C, their contribution relates too.

Instructions on how to upload the extended synopses to the conference's web browser-based file submission system (IAEA-INDICO) will be available on the conference web page (see Section O below). The extended synopses **must** be submitted through this system by **15 January 2024**

IMPORTANT: The system for electronic submission of papers, IAEA-INDICO, is the sole mechanism for submission of contributed papers. Authors are encouraged to submit papers as early as possible. The IAEA will not accept submissions via email.

(b) Acceptance of papers for oral or poster presentation

The extended synopsis will be considered only if the Participation Form (Form A) and Form for Submission of a Paper (Form B) have been received by the above-mentioned deadline and through the established official channels (see Section F).

A limited number of extended synopses will be selected for submission of a full paper and, consequently, for either oral or poster presentation, which should be delivered during the conference sessions.

Authors will be notified by 15 February 2023 as to whether their extended synopses have been accepted and, if so, whether the full papers should be delivered as oral or poster presentations.

Authors will be asked to provide their full-length papers (a maximum of eight pages) by **01 March 2024**. Guidelines and a template for the preparation and submission of full papers and posters will be made available on the conference web page. The full paper must be submitted through the IAEA-INDICO system in the same way as the extended synopses.

The Secretariat reserves the right to exclude papers that do not comply with its quality standards or that do not apply to one of the topics outlined in Section C above.

(c) Proceedings

The proceedings of the conference will be published by the IAEA and made available on the IAEA website after the conference. The proceedings will include the conference conclusions and recommendations, session summaries and the full papers.

F. Participation and Registration

All persons wishing to participate in the event must be designated by an IAEA Member State or should be member of an organization that has been invited to attend. The list of IAEA Member States and invited organizations is available on the event web page (see Section O).

Registration through the InTouch+ platform:

- 1. Access the InTouch+ platform (https://intouchplus.iaea.org):
 - Persons with an existing NUCLEUS account can <u>sign in here</u> with their username and password;
 - Persons without an existing NUCLEUS account can <u>register here</u>.
- 2. Once signed in, prospective participants can use the InTouch+ platform to:
 - Complete or update their personal details under 'Basic Profile' (if no financial support is requested) or under 'Complete Profile' (if financial support is requested) and upload the relevant supporting documents;
 - Search for the relevant event (EVT2300035) 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 Conference.Contact-Point@iaea.org);
 - If applicable, indicate whether a paper is being submitted and complete the relevant information;
 - 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 Participation Form (Form A), Form for Submission of a Paper (Form B) and/or Grant Application Form (Form C);
 - Submit their application.

Once submitted through the InTouch+ platform, the application will be transmitted automatically to the required authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority). If approved, the application will automatically be sent to the IAEA.

NOTE: Should prospective participants wish to submit a paper or request financial support, the application needs to be submitted by the specified deadlines (see section M).

For additional information on how to apply for an event, please refer to the <u>InTouch+ Help</u> page. Any other issues or queries related to InTouch+ can be sent to <u>InTouchPlus.Contact-Point@iaea.org</u>.

If it is not possible to submit the application through the InTouch+ platform, prospective participants are requested to contact the IAEA's Conference Services Section via email: Conference.Contact-Point@iaea.org.

Participants are hereby informed that the personal data they submit will be processed in line with the <u>Agency's Personal Data and Privacy Policy</u> and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. Further information can be found in the <u>Data Processing Notice</u> concerning IAEA InTouch+ platform.

G. Distribution of Documents

A preliminary programme will be made available on the conference web page (see Section O) prior to the start of the conference. The final programme and The electronic compilation of synopses will be accessible free of charge to participants registered for the conference.

H. 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 conference. The IAEA has, however, limited funds at its disposal to help cover 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 conference.

If participants wish to apply for a grant, they should submit applications to the IAEA using the InTouch+ platform through their competent national authority (see Section F). Participants should ensure that applications for grants are:

- 1. Submitted by 15 January 2024;
- 2. Accompanied by Grant Application Form (Form C); and
- 3. Accompanied by Participation Form (Form A).

Applications that do not comply with the above conditions cannot be considered.

Approved grants will be issued in the form of a lump sum payment that usually covers **only part of the cost of attendance**.

I. Working Language

The working language of the conference will be English. All communications and papers must be sent to the IAEA in English.

J. Venue and Accommodation

Detailed information on accommodation and other relevant matters will be sent directly to all designated participants approximately three months before the opening of the conference. This information will also be made available on the conference web page (see Section O below) in due course.

K. Exhibitions

A limited amount of space will be available for commercial vendors' displays/exhibits during the conference. Further information will be posted in due course on the conference web page (see Section O).

L. Visas

Designated participants who require a visa to enter China should submit the necessary application to the nearest diplomatic or consular representative of China at least four weeks before they travel to China.

M. Key Deadlines

Submission of Form for Submission of a Paper (Form B) and synopses: 15 January 2024

Submission of Grant Application Form (Form C): 15 January 2024

Notification of acceptance of synopses: 15 February 2024

Submission of accepted full paper: 1 March 2024

N. Conference Secretariat

General contact details:

International Atomic Energy Agency Vienna International Centre PO Box 100 1400 VIENNA AUSTRIA

Tel.: +43 1 2600 0 Fax: +43 1 2600 2007

Email: Official.Mail@iaea.org

Scientific Secretaries:

Mr Simon Morgan

Operational Safety Section
Division of Nuclear Installation Safety
Department of Nuclear Safety and Security

Tel.: +43 1 2600 26083 Email: <u>OS2024@iaea.org</u>

Mr Kari Maekelae

Operational Safety Section
Division of Nuclear Installation Safety
Department of Nuclear Safety and Security

Tel.: +43 1 2600 26078 Email: OS2024@iaea.org

Administration and organization:

Mr Sanjai Padmanabhan

Conference Services Section Division of Conference and Document Services Department of Management

Tel.: +43 1 2600 24838

Email: Conference.Contact-Point@iaea.org

Subsequent correspondence on scientific matters should be sent to the Scientific Secretary of the conference and correspondence on administrative matters to the IAEA's Conference Services Section.

O. Conference Web Page

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

https://www.iaea.org/events/operational-safety-conference-2024