



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

International Conference on 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

30 August–3 September 2021

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 operation and long term operation among representatives of new and existing nuclear operators, regulators, technical support organizations, construction companies and other relevant organizations.

Specifically, the conference aims to:

- Describe the role of leaders and highlight how coaching can drive continuous improvement;
- Discuss opportunities and lessons learned from new NPP construction;
- Explain the role of operational safety peer reviews as tools for confirming the commitment of NPP owners and operators to safety improvements;
- Present case studies that illustrate how the development of standards and improvements in risk management and in nuclear and industrial safety initiatives, together with an effective safety culture, can enhance operational safety performance;
- Discuss the role of corporate organizations in maintaining and enhancing operational safety throughout the lifecycle of a nuclear power plant;
- Review the management of long term operation of NPPs, including ageing management and the additional research and development activities needed to define the limiting factors for plant life extension;
- Examine the importance of operating experience feedback and periodic safety reviews for the enhancement of operational safety; and
- 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 leaders for enhanced safety performance;
- Creating an effective nuclear safety culture;
- Coaching operational staff to improve 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;
- Knowledge transfer between existing plants and new units within a fleet;
- Preparing for operation;
- 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:

- Operational safety performance reviews;
- Operator fundamentals;
- Performance improvements — case studies;

- Maintaining the focus on nuclear and industrial safety;
- Enhancing risk management and decision making processes; and
- The role of regulations in operational performance improvement.

Session 4: Corporate Oversight — Influencing Behaviours

Contributions are sought on the following topics:

- Corporate management — challenges and opportunities;
- Independent oversight;
- Measuring performance improvement;
- Strengthening stakeholder–regulator–corporate–plant relationships;
- Managing organizational change; and
- Institutional strength in depth — stakeholder–regulator–licensee relationships.

Session 5: Long Term Operations — Extended Operations

Contributions are sought on the following topics:

- Plant life extensions;
- Ageing management programmes;
- The role of periodic safety reviews in long term operation; and
- Findings from the IAEA’s Safety Aspects of Long Term Operation missions.

Session 6: Operating Experience — Completing the Learning Cycle

Contributions are sought on the following topics:

- Nuclear and non-nuclear operating experience programmes;
- Human performance strategies;
- Developing a learning culture;
- Event analysis techniques; and
- Capturing and using lessons from event analysis.

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 of 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 relevant 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 to which topic outlined in Section C their contribution relates.

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 **26 March 2021**. No other form of submission will be accepted. The extended synopsis should also be submitted, together with a completed Participation Form (Form A) and Form for Submission of a Paper (Form B), to the competent official authority (see Section F) for subsequent electronic transmission to the IAEA (Official.Mail@iaea.org), to be received by the IAEA by **26 March 2021**.

(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.

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 sessions of the conference.

Authors will be notified by **14 May 2021** 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 **2 July 2021**. 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 conference 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, participants are requested to send the following form(s) (as applicable) to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority):

- Participation Form (Form A): participation only; no deadline if only Form A is submitted.
- Form for Submission of a Paper (Form B): participants submitting a paper through IAEA-INDICO (deadline **26 March 2021**) must send the completed and signed Form B together with Form A to their competent national authority for onward transmission to the IAEA (Official.Mail@iaea.org) by **26 March 2021**.
- Grant Application Form (Form C): participants requesting financial support from the IAEA, must complete Form C and send it together with Form A (and Form B, if applicable) to the competent national authority for onward transmission to the IAEA (Official.Mail@iaea.org) by **26 March 2021**. Form C must be stamped and signed by the competent national authority.

Participants who are members of an organization invited to attend are requested to send the above form(s) through their organization to the IAEA (Official.Mail@iaea.org).

Participants who register in accordance with the above procedure will receive from the IAEA further information approximately three months before the opening of the conference.

G. Distribution of Documents

A preliminary programme will be made available on the conference web page (see Section O) no later than six weeks before the start of the conference. The final programme and the Book of Extended Synopses will be available upon on-site registration at the conference.

H. Expenditures and Grants

No registration fee will be 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 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 conference.

If participants wish to apply for a grant, they should submit applications to the IAEA to this effect through their competent national authority. Participants should ensure that applications for grants are:

1. Submitted through the competent national authority by **26 March 2021**;
2. Accompanied by a completed and signed Grant Application Form (Form C); and
3. Accompanied by a completed 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:	26 March 2021
Submission of Grant Application Form (Form C):	26 March 2021
Notification of acceptance of synopses:	14 May 2021
Submission of accepted full paper:	2 July 2021

N. Conference Secretariat

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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/international-conference-on-operational-safety-of-nuclear-power-plants-2020>