International Conference on Enhancing the Operational Safety of Nuclear Power Plants



Monday, 15 April 2024 - Friday, 19 April 2024 Beijing

Scientific Programme

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.

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.