

### **International Conference on**

# Resilience of nuclear installations against external events from a safety perspective

Focus on climate change

20–24 October 2025 Vienna, Austria

## Background

The International Atomic Energy Agency (IAEA) is pleased to announce the inaugural International Conference on Resilience of Nuclear Installations against External Events from a Safety Perspective. Resilience may be defined as 'the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events.' In the context of external hazards, the resilience of nuclear installations is their ability to prepare and plan for, absorb, recover from and more successfully adapt to these hazards. Regarding safety, resilience can be a measure of an installation's ability to recover to a safe condition after an incident. Resilience also encompasses the development of flexible solutions that can support the response to emerging, changing or unknown threats, as well as planning, response and recovery strategies. A special focus of this conference will be the industry's efforts to address the impact of climate change on external hazards and installation resilience. Many plants have been designed for loads resulting from natural phenomena, such as floods and high winds, based on analysis and interpretation of historical data. However, climate change is affecting the severity and frequency of many of these phenomena. Furthermore, changes in geological conditions (e.g., fluid injection to the Earth's crust), land use, aircraft flight patterns and addition of new industrial facilities lead to non-stationarity of external hazards.

### **Purpose and objectives**

The purpose of the conference is to share experiences and discuss current and novel methods to evaluate the resilience and robustness of nuclear installations and radioactive waste disposal facilities against external events, particularly in the context of the changing climate. This will include existing facilities, as well as those under design, licensing and construction.

### **Main topics**

The conference will be arranged into the following six themes and encourages submittals aligned with these:

- 1. Identification and analysis of external hazards, consideration of uncertainties in hazard analyses, and events resulting from combined hazards.
- 2. Impact of external hazards on nuclear installations and radioactive waste disposal facilities.
- 3. Safety features of innovative emergent reactor designs and their contribution to resilience.
- 4. Post-event response.
- 5. Risk-informed, performance-based approaches for safety assessments of nuclear installations against external events.
- 6. Regulatory matters related to enhancing nuclear installation resilience.









### Audience

Representatives of nuclear installation owners/ operators, technical service organizations, regulators, designers, research institutes, vendors (nuclear steam supply system suppliers), civil protection authorities, international organizations and nongovernmental organizations, and other stakeholders.

# Registration

No registration fee is charged.

# Language

The working language of the conference will be English.

# **Key deadlines**

31 May 2025

Submission of synopses through IAEA-INDICO

Submission of Form B (together with Form A) through the InTouch+ platform

Submission of Form C (together with Form A) through the InTouch+ platform

Submission of Form A only (no paper submission, no grant request) through the InTouch+ platform

30 June 2025 Notification of acceptance of synopses for oral or poster presentation

15 October 2025

IAEA contacts

### Scientific Secretaries of the conference

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### Administration and organization

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# **Conference webpage**

Detailed information on administrative matters including registration, paper submission and grants is provided on: www.iaea.org/events/rni2025

Please include reference number IAEA-CN-337 in all communications.



