Key deadlines

31 October 2016	Submission of abstract, including submission of Participation Form (Form A) and Form for Submission of a Paper (Form B)
31 October 2016	Submission of Grant Application Form (Form C)
15 January 2017	Notification of acceptance of contributed paper
31 March 2017	Submission of contributed paper

Paper submission

Abstracts and contributed papers must be submitted to the IAEA's paper submission platform INDICO at:

https://conferences.iaea.org/indico/event/125

Exhibitions

A limited amount of space will be available for commercial vendors' displays/exhibits during the conference. Interested parties should contact the Conference Secretariat by email (NPPsafety2017@iaea.org) by **31 March 2017.**

Registration and funding

No registration fee is charged to participants.

The IAEA has, however, limited funds at its disposal to help cover the cost of attendance of certain participants. Approved grants will be issued in the form of a lump sum payment that usually covers only part of the cost of attendance.

Language

The conference will be held in English.

Conference secretariat

Scientific secretariat:

Ms Cornelia Spitzer
Head, Safety Assessment Section
Division of Nuclear Installation Safety
Department of Nuclear Safety and Security
Tel.: +43 1 2600 22830

Mr Stefano Monti
Head, Nuclear Power Technology Development Section
Division of Nuclear Power
Department of Nuclear Energy
Tel.: +43 1 2600 22812

Administration and organization:

Ms Julie Zellinger
Conference Services Section
Division of Conference and Document Services
Department of Management
IAEA-CN-251
Tel.: +43 1 2600 21321

Email address of the Conference Secretariat:

NPPsafety2017@iaea.org

Conference web page

Please visit the IAEA conference web page regularly for details as well as new information regarding this conference:

http://www-pub.iaea.org/iaeameetings/50816/
Topical Issues in Nuclear Installation Safety

CN-251

http://www-pub.iaea.org/iaeameetings/50816/NPPSafety2017

17-08551

International Conference on Topical Issues in Nuclear Installation Safety

Safety Demonstration of Advanced Water Cooled Nuclear Power Plants

6–9 June 2017
Vienna, Austria

Organized by

IAEA 60 Years
Atoms for Peace and Development

Background

Over the years, the IAEA has organized a series of international conferences on topical issues in nuclear installation safety. The conferences have yielded recommendations and led to activities that have served to increase international cooperation and to promote the exchange of vital information to enhance nuclear safety.

Objectives

The purpose of the conference is to foster the exchange of information on the latest approaches, advances and challenges in the demonstration of the safety of nuclear power plants that are planned to be licensed and constructed in the near future, in particular those using water cooled reactors.

This conference in the series will focus on the safety demonstration of the nuclear power plants (NPPs) that have been and will be licensed and constructed in the near future, which includes, among other aspects, the establishment of, and compliance with, comprehensive and rigorous requirements for siting, design and operation; the demonstration of adequate safety margins against external hazards; and a robust and reliable design to prevent early radioactive releases or radioactive releases large enough to require long term protective measures and actions. The introduction of passive safety systems, digital instrumentation and a number of innovative safety features in the designs, as well as the inclusion of severe accidents in the design envelope of the new plants, are some of the developments that pose crucial challenges to the safety demonstration and licensing of new reactors.

The conference is expected to be of substantive benefit for various types of stakeholder organizations in Member States as a result of the interchange of experiences that can provide valuable insights into how the topics covered by the conference are currently addressed in different countries. Accordingly, the conference should contribute to the harmonization of approaches and methods applied for the safety demonstration of nuclear power plants worldwide.

Outcome

It is expected that the conference will provide valuable recommendations for future IAEA activities in the areas covered by the conference and for strengthening international cooperation in particular.

Audience

The conference is directed at a broad range of professionals in the area of nuclear safety, including those involved in the academia, regulatory and commercial facets of the industry. As such, the conference will bring together high level decision makers and policy formulators, design organizations, nuclear regulators, plant operators, academia and technical support organizations in IAEA Member States.

Topics

The conference will be devoted to the following four key topical issues:

Safety assessment of advanced reactor designs

- Use of advanced models and codes; their verification and validation
- Assessment of innovative design safety features, e.g. passive systems, in-vessel melt retention and ex-vessel corium cooling
- Safety assessment of small and medium sized or modular reactors
- Complementary and adequate use of deterministic and probabilistic safety analysis of plant design and operation

Design safety principles

- Design extension conditions (DEC) without significant fuel degradation and with core melting
- Practical elimination of early or large releases
- Margins regarding external hazards more severe than those selected for the design basis and avoidance of cliff edge effects
- Assessment of defence in depth, reliability of the provisions for each level and independence between different levels

Licensing of advanced reactor designs

- Meeting the objectives of the Vienna Declaration on Nuclear Safety
- Harmonization of approaches and methods applied, as well as of safety and licensing requirements
- Licensing of passive systems, as well as of digital instrumentation and control systems, including a consideration of design extension conditions
- Licensing of small and medium sized or modular reactors, including considerations for remote installations and multiple unit operation

Safety reinforcement of existing installations

- Implications of the Vienna Declaration on Nuclear Safety for existing NPPs
- Periodic safety reviews
- Definition and use of safety goals
- Backfitting measures, particularly for coping with severe accidents
- Use of non-permanent equipment for accident conditions