

# Announcement of International Workshops On NPPs-Safety & Sustainability

CANSAS – 2015 (CANDU Safety Association for Sustainability) & IW – NRTHS – 2015 (New Horizons in Nuclear Reactor Thermal-Hydraulics and Safety)

8 – 11 December 2015

Anushaktinagar Mumbai, India

# **CANSAS – 2015 & IW – NRTHS – 2015**

Hosted by



# Atomic Energy Regulatory Board India

In association with:



Indian Nuclear Society

# BARC

**Bhabha Atomic Research Centre** 



Nuclear Power Corporation of India Limited

# Co-sponsored by:



CANDU Safety Association for Sustainability CANSAS



# Introduction:

In a world continually faced with the twin challenges of global warming and ever-expanding energy needs for sustaining economic growth, nuclear energy remains a unique option as it offers clean, reliable and cost-effective energy. While Nuclear Energy is a necessity to sustain supply of bulk clean energy, its own sustenance is dependent on its safety performance. The responsibility to continually enhance the state of art in this regard rests on all, the designers, operators, regulators, industry and academia, working in the field of nuclear technology.

Acknowledging the need to synergise the latest knowledge and experience available with the various stakeholders in nuclear sector and to extract the benefits of enhanced collaboration for safety, the Atomic Energy Regulatory Board, India and other agencies are coming together to organise a pair of workshops, complementing each other on the subject and thus creating a platform to facilitate efficient networking among the experts in the field. These are the CANSAS-2015 along with the International Workshop on Nuclear Reactor Thermal-Hydraulics and Safety (IW-NRTHS-2015).

#### **CANSAS-2015:**

CANDU Safety Association for Sustainability (CANSAS) was formed in the year 2000 in Korea with members from different Korean nuclear organizations working on CANDU technology which was later extended to global participants. The CANSAS conducts workshops every year on different aspects on CANDU technology. This is the 4th international workshop of CANSAS. Its main objective is to create a forum for sharing of expertise among the nuclear safety experts from countries operating Pressurized Heavy Water Reactors. Senior experts from the regulatory bodies, research establishments, operating organisations as well as designers and suppliers from around the world are invited to attend the CANSAS-2015.

#### **IW-NRTHS-2015**:

Department of Atomic Energy (DAE), India has been organizing the international workshop on "New Horizons in Nuclear Reactor Thermal-Hydraulics and Safety (IW-NRTHS)" since 2007 with the purpose to discuss the recent developments and future challenges in various areas of nuclear reactor thermal hydraulics and safety. The 5<sup>th</sup> workshop in this series is being organised this year.

Since there is lot in common in the theme of IW-NRTHS and that of CANSAS - 2015, these workshops are planned together with the aim of engaging a wider expertise and to discuss the generic issues of safety and sustainability in a more comprehensive manner.

# About the Workshops:

The workshops will create an opportunity to discuss the safety related issues for NPPs, regulatory practices, operating experience, challenges and R&D activities. The workshops will also address other aspects such as ageing & safety enhancements of the existing reactors and new generation reactor designs. Panel discussions on the major current and emerging challenges will also be part of these workshops. These workshops are structured with thematic Plenary Sessions on generic issues of common interest followed by separate sessions on specific issues. The plenary lectures will be delivered by eminent experts invited to share their knowledge and experience. Each session starts with an invited lecture on specific topic followed by contributory papers / presentations.

The language for the presentations and for the workshop proceedings will be English. The workshop proceedings will be brought out in the electronic form and would be made available to the delegates during the workshop.

Participants are invited to contribute original papers, oral or poster presentations on topics related to safety and sustainability of NPPs including the following.

- 1. Current safety outlook:
  - New safety perspectives for existing and new NPPs
  - Defence in depth
  - Post Fukushima design modifications, retrofitting in existing reactors
  - Deterministic and probabilistic analytical methods
  - External hazards

2. Severe Accident prevention, mitigation and management:

- Source terms and radionuclide behaviour
- Phenomenological issues in PHWRs (fuel failure, PT-CT rupture and core collapse, debris formation, debris melting and coolability, melt pool formation and its coolability, calandria failure and molten core concrete interaction, fission product release and transport)

- In-vessel corium retention
- Containment protection
- Hydrogen production and management
- Containment filtered venting
- 3. Long term operation:
  - Ageing management of reactor components
  - Safety enhancements

# Call for Papers & Presentations.

Papers / Presentations are invited on the topics outlined above and other subjects of interest relevant to the theme of the workshops. The abstract of the paper / presentation should clearly indicate on the top the name of the workshop in which the participant would like to make the presentation.

Abstracts of about 250 words should be submitted by e-mail. Abstracts should clearly bring out the outline of the paper / presentation, objectives and the important results of the studies carried out and the main conclusions. The abstract should contain the title of the paper / presentation, name(s) of the author(s) / presenter(s), their affiliation and contact details including mailing address, telephone & fax numbers and the e-mail. It is important to note that the papers are accepted based on the understanding that the author or one of the authors will attend and make the presentation at the workshop. Guidelines for submission of the paper / presentations will be communicated to the authors upon acceptance of the abstract.

# **Important Dates:**

Submission of Abstracts	September 15, 2015
Intimation of Acceptance	September 30, 2015
Last date for registration of international participants	October 15, 2015
Last date for registration of Indian participants	November 15, 2015

## **Participation:**

Participation in the workshop will be through:

- Submission of abstract
- Nomination from parent organisation
- Invitation from the organisers

#### All correspondences to be addressed to:

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