

# INTERNATIONAL WORKSHOP OF THE OECD NEA ON SAFETY ASSESSMENT OF NUCLEAR INSTALLATIONS FOR COMBINATIONS OF EXTERNAL HAZARDS

Fontenay-aux-Roses, France, September 11 – 13, 2023



Hosted by the Institut de Radioprotection et de Sûreté Nucléaire (IRSN)

## Key Dates

**26<sup>th</sup> May 2023**

**16<sup>th</sup> June 2023**

**14<sup>th</sup> July 2023**

**28<sup>th</sup> August 2023**

**11<sup>th</sup> -13<sup>th</sup> September 2023**

**Deadline for Abstract Submission**

**Notification to Authors**

**Deadline for Attendance Registration**

**Deadline for Presentation Submission**

**Workshop**

## General Information

This is the announcement and call for presentations for *the International Expert Workshop on the **Safety Assessment of Nuclear Installations for Combinations of External Hazards*** being organized under the auspices of the OECD Nuclear Energy Agency (NEA) Committee on the Safety of Nuclear Installation (CSNI) Working Group of External Events (WGEV) and Working Group on Risk Assessment (WGRISK). The Workshop will be hosted by the Institut de Radioprotection et de Sûreté Nucléaire (IRSN) in Fontenay-aux-Roses, France, from September 11 to 13, 2023.

Working under the mandate of the CSNI, the main mission of the WGEV is to improve the understanding and treatment of external hazards that would support the continued safety performance of nuclear installations, and improve the effectiveness of regulatory practices in NEA member countries. The main goal of WGRISK activities is to advance the understanding and utilization of probabilistic safety assessment (PSA) in ensuring the continued safety of nuclear installations in member countries.

## Background

In response to the technical and scientific needs emerged recently in this area, Working Group of External Events (WGEV) and Working Group on Risk Assessment (WGRISK) initiated a joint task entitled *Combinations of External Hazards – Hazard and Impact Assessment and Probabilistic Safety Analysis (PSA) for Nuclear Installations*. This task addresses practices in member countries in considering combinations of external hazards in the design, operation, and safety assessment of nuclear installations. The first phase of the activity was a survey sent to the members of both WGEV and WGRISK in order to develop an informed understanding of the regulatory requirements and the technical approaches in member countries regarding the treatment of combined external hazards, characterizing integrated hazard impacts and performing PSA for combined external hazards.

The second phase of the task will be a workshop where subject matter experts can discuss understanding the nature of combined hazards, hazards impact assessment, and PSA for combined hazards to gain more detailed insights and to draw further conclusions on the topic. This electronic leaflet is the workshop announcement.

The workshop is expected to help identify and characterize important hazard combinations, understand the state-of-the-art in assessing the integrated impacts of hazard combinations, as well as in developing PSA for hazard combinations. Further, the workshop discussions should support the identification of further R&D needs and potential for improvements in the safety assessment of nuclear installations for combined external hazards including PSA in particular.

## Format

The focus of the Workshop is on exchanging information in the various workshop topics addressing also commonalities as well as key differences and challenges in the safety assessment of nuclear power plants for external hazards. The Workshop will provide a forum for discussions and for sharing ideas between nuclear safety professionals including specialists in external hazards and PSA.

The Workshop will include plenary and technical sessions in addition to a facilitated wrap-up session. Active participation of the workshop attendees in the discussions as well as formulating conclusions and recommendations is highly appreciated. Information obtained as a result of the Workshop should provide a better understanding and improved interpretations of subjects, topics and issues related to safety assessment of nuclear power plants for external hazards.

A joint WGEV-WGRISK report (workshop proceedings with summarized results and some conclusions and recommendations for follow-on activities) will be prepared on the basis of the information presented and discussed during the workshop.

## Suggested Workshop Topics

Presentations addressing all issues and topics related to safety assessment of nuclear power plants for external hazards are requested.

The following topics are planned to be addressed at the Workshop:

- Regulatory environment related to assessing combinations of external hazards (including regulatory requirements and guidance);
- Supporting data and uncertainties as well as operational experience regarding combinations of external hazards;
- Selection and assessment of combined external hazards (including the use of deterministic as well as probabilistic approaches);
- Assessment of integrated hazard impact, as well as the associated plant response and fragilities (including input to PSA);
- Risk assessment (PSA) for combined external hazards (including modelling of accident sequences, risk quantification and interpretation of results);
- Overall experience from safety assessment for combined external hazards (including lessons learned as well as recommendations on good practices and new initiatives in this area).

## Logistics and Participation in the Workshop

### Participants

The organizers kindly invite experts from industry, regulatory authorities, technical support organizations (TSOs) and research institutes, safety analysis practitioners and consultants involved in safety assessment of nuclear power plants for external hazards from the OECD/NEA member countries to contribute and participate.

### Registration

All participants have to register by **14<sup>th</sup> July 2023** by filling in the **Registration Form**. Please register via: [REGISTRATION FORM](#).

### Presentations

Participants intending to present papers related to the workshop topics shall submit an abstract (between 300 and 500 words) that provides a brief overview of the content of their proposed presentation. All abstracts should be submitted **by 26<sup>th</sup> May 2023** by filling in the [Submission Form](#). The Organizing Committee will review abstracts and notify the authors by 16<sup>th</sup> June 2023 on the acceptance of the presentations. Presentation slides should be uploaded on the [event myNEA space](#) or sent to Ms Taehee Kim ([taehee.kim@oecd-nea.org](mailto:taehee.kim@oecd-nea.org)) and Ms Katja Donothek ([Katja.DONOTHEK@oecd-nea.org](mailto:Katja.DONOTHEK@oecd-nea.org)) **28<sup>th</sup> August 2023**.

### Registration Fee

The Workshop is free of charge for all participants. Accommodation and travel will not be provided and must be organised by the participants.

### Language

All presentations and discussions will be in English, translation cannot be provided.

## Location and Accommodation

The Workshop will be hosted by IRSN in Fontenay-aux-Roses, France. Fontenay-aux-Roses can be easily reached from Paris by metro and bus.

### Venue Address:

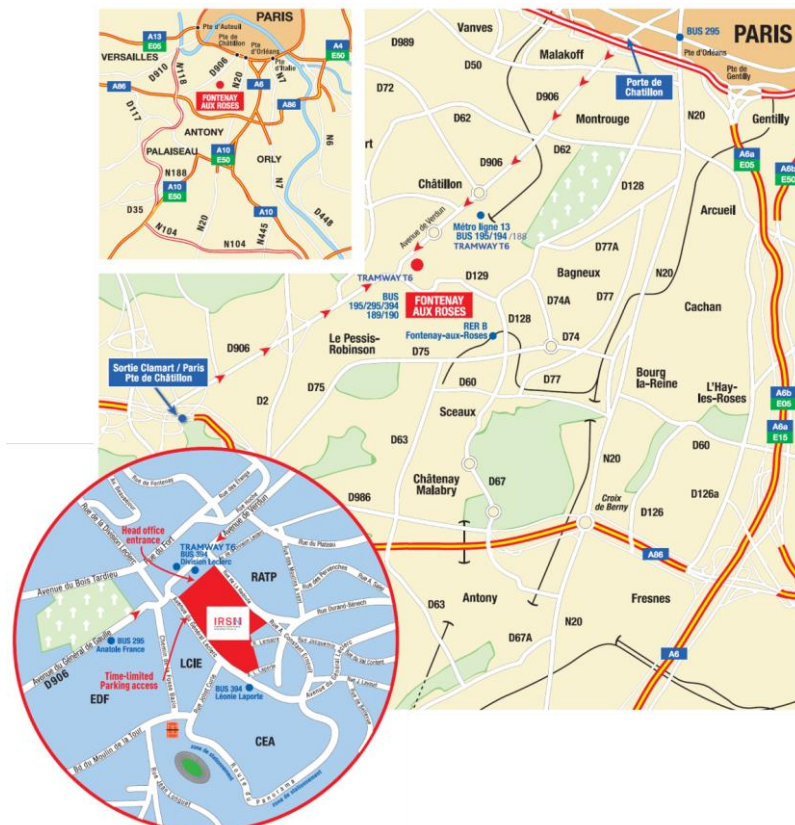
IRSN Auditorium  
31 avenue de la Division Leclerc  
92260, Fontenay-aux-Roses  
France

## SECURITY AND BADGES

On arrival, you must register at the IRSN Reception desk and give your passport or identity card to obtain a visitor's badge. The badge should be returned at the same place and you will get back your passport or your identity card. You can keep the badge for the 3 days or obtain a badge each day at the same place. For registration, you must fill in the information required by 14<sup>th</sup> July 2023 using the [registration form](#). Please arrive well in advance of the start of your meeting to allow sufficient time for the registration formalities. For security reasons, you are requested to wear your visitor's badge at all times.

## TRANSPORTATION

See map below



 **BY PLANE**

Paris Orly Airport:

at 18 km

Paris Roissy Charles de Gaulle Airport:

at 40 km

 **BY CAR**

From Paris/Porte de Châtillon:

take D906 direction

CLAMART/VERSAILLES. After 4 km, you arrive at Place de la Division Leclerc.

From Versailles:

take highway A86, Exit CLAMART PARIS PORTE DE CHÂTILLON. Take D906, after 3 km, you arrive at Place de la Division Leclerc.

 **BY TRAIN**

RER B (Charles de Gaulle/Robinson):

Station FONTENAY-AUX-ROSES.

Then Bus 394: stop DIVISION LECLERC.

RER C (Versailles Chantier/Massy Palaiseau):

Station ISSY-VAL-DE-SEINE.

Then Bus 394: stop DIVISION LECLERC.



**BY METRO**

Line 4:

Station PORTE D'ORLEANS. Bus 388 or 194 Stop CHÂTILLON/MONTROUGE.

Then Tramway T6, Stop DIVISION LECLERC.

Line 13:

Station CHÂTILLON/MONTROUGE.

Then Tramway T6, stop DIVISION LECLERC

## ACCOMMODATION

Participants have to make their own hotel reservations.

## Workshop Organizing Committee

John PERDIKARIS	OPG	Canada
Dana HAVLIN NOVAKOVA	SUJB	Czech Republic
Vincent REBOUR	IRSN	France
Marina ROEWKAMP	GRS	Germany
Gernot THUMA	GRS	Germany
Attila BAREITH	NUBIKI	Hungary
Eujeong CHOI	KAERI	Republic of Korea
Minkyu KIM	KAERI	Republic of Korea
Zoltan KOVACS	RELKO	Slovakia
Vinh DANG	PSI	Switzerland
Andreas SCHWAB	ENSI	Switzerland
Joseph KANNEY	US NRC	USA
Taehee KIM	OECD/NEA	France
Katja DONOTHEK	OECD/NEA	France
Yuji KUMAGAI	OECD/NEA	France

## Dates and Deadlines

Deadline for Abstracts Submission	<b>26<sup>th</sup> May 2023</b>	Submission <a href="#">Form</a>
Notification of Accepted Presentations	<b>16<sup>th</sup> June 2023</b>	
Deadline for Attendance Registration	<b>14<sup>th</sup> July 2023</b>	<a href="#">Registration Form</a>
Deadline for Presentation Submission	<b>28<sup>th</sup> August 2023</b>	<a href="#">Event MyNEA</a>

## Workshop Proceedings

The Task Report from the Workshop will be published by the OECD NEA and will include objectives and important comments provided during the Workshop, all Workshop presentations (as attachment), summaries, conclusions and recommendations made during the discussions, concluding remarks as well as new or emerging areas of interest identified in the final closing session. A specific part of the report will be dedicated to the discussion of good practices and experiences.

## Workshop Contacts

### NEA Secretariat:

#### Kim Taehee

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