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国际原子能机构

International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

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The Secretariat of the International Atomic Energy Agency (IAEA) presents its compliments to the IAEA's Member States and has the honour to draw their attention to the **Joint IAEA–NEA Workshop on the Current Implementation Status of Measures to Manage Open Phase Conditions in Electrical Power Systems of Nuclear Power Plants** (hereinafter referred to as “event”), which was scheduled to be held at the IAEA's Headquarters in Vienna, Austria, but owing to the COVID-19 outbreak will now be held virtually via Cisco WebEx from **27 to 29 October 2020**.

The purpose of the event is to follow up and capture the various practices and design provisions regarding open phase conditions that have been implemented to upgrade existing plant designs in addition to highlighting any difficulties that have been encountered with their implementation.

The attached Information Sheet provides further details of the event.

The event will be held in English.

Member States are informed that designations already received for this event will remain valid. Should Member States not have submitted any designations or wish to change their designation, they are invited to designate one or more participants to represent the Government at this event. Member States are strongly encouraged to identify suitable women participants.

Designations should be submitted to the IAEA through the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) not later than **30 September 2020** using the attached Participation Form (Form A). Completed and authorized Participation Forms should be sent either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Copies should be sent by email to the Scientific Secretary of the event, Mr Alexander Duchac, Division of Nuclear Installation Safety, Department of Nuclear Safety and Security (Email: A.Duchac@iaea.org), and to the Administrative Secretary, Ms Mercy Waititu-Dibarbora (Email: M.Waititu-Dibarbora@iaea.org). The Scientific Secretary of the event will liaise with the participants directly concerning further arrangements, as appropriate, once the official designations have been received.

The IAEA takes no responsibility for, and the provider of the virtual meeting services has represented and warranted that the Services shall not contain, and that no end user shall receive from the software used to hold the virtual meeting, any virus, worm, trap door, back door, timer, clock, counter or other limiting routine, instruction or design, or other malicious, illicit or similar unrequested code, including surveillance software or routines which may, or is designed to, permit access by any person, or on its own, to erase, or otherwise harm or modify any data or any system, server, facility or other infrastructure of any end user (collectively, a “Disabling Code”).

The Secretariat of the International Atomic Energy Agency avails itself of this opportunity to renew to the IAEA’s Member States the assurances of its highest consideration.



2020-08-27

Enclosures: Information Sheet

Participation Form (Form A)



Joint IAEA–NEA Workshop on the Current Implementation Status of Measures to Manage Open Phase Conditions in Electrical Power Systems of Nuclear Power Plants

Virtual Event

27–29 October 2020

Ref. No.: EVT1904966

Information Sheet

Introduction

The NEA ROBELSYS¹ workshop in 2014 identified that the open phase condition (OPC) was a phenomenon that had affected a number of nuclear power plants (NPPs) around the world but for which there was little common understanding on the effects or how to detect and manage the issue. Participants in that workshop worked with the IAEA to initiate development of the IAEA Safety Report Series No. 91 on Impact of open phase conditions on electrical power systems of nuclear power plants.

IAEA Safety Report 91 was developed following identification of issues during the NEA ROBELSYS workshop in 2014 and was written with the participation of a number of active members of the NEA WGELEC (Working Group on Electrical Systems).

At the time that Safety Report 91 was written, which coincided with the establishment of the NEA WGELEC, techniques were still be developed to detect OPC. Therefore, whilst Safety Report 91

¹ Workshop on robustness of electrical systems of NPPs (ROBELSYS) in Light of the Fukushima Daiichi Accident organized by OECD/NEA Committee on the Safety of Nuclear Installations in Paris, 1 – 4 April 2014.

identified some early possible solutions, there was little experience with their deployment or use and therefore it was too early to provide any definitive advice on suitable solutions.

Three years has passed since publication of Safety Report 91 and measures have now been designed and implemented at many NPPs. Both organisations have long recognised the benefit in exploring how plant designers, operators and regulators have managed this topic. Therefore, it is proposed to undertake an IAEA-NEA joint workshop for Open Phase Condition to bring together member states in discussing and comparing the various measures that have been put in place and any difficulties encountered during their development or deployment, identifying, where possible, good practices.

Objectives

The objective of the workshop is to follow up and capture the various practices and design provisions regarding open phase conditions that have been implemented to upgrade existing plant designs in addition to highlighting any difficulties that have been encountered with their implementation.

Target Audience

Participation is solicited from staff members of regulatory bodies, NPP operators, utility organizations, design and engineering consultant organizations, as well as from international organizations engaged in activities related to NPP safety and regulation. To ensure maximum effectiveness in the exchange of information, participants should be actively involved in the subject of the event.

The event is, in principle, open to all officially designated persons. The IAEA, however, reserves the right to restrict participation due to limitations imposed by the available infrastructure. It is, therefore, recommended that interested persons take the necessary steps for the official designation as early as possible.

Working Language(s)

English

Expected Outputs

An important aim of the workshop is to undertake comparison and identification of good practices and difficulties experienced with implementing measures to identify and manage Open Phase Conditions at Nuclear Power Plants.

It is expected that the workshop will also provide valuable recommendations for future IAEA and NEA activities in the areas covered by the workshop, and for strengthening international cooperation to advance nuclear safety.

A publicly available workshop summary report will be published jointly with the NEA.

Structure

Presentations will be organized to address the safety aspects and design criteria considered for Open Phase Condition of electrical power systems in NPPs.

The opening session will include welcome addresses. This session will be further complemented by keynote presentations on the importance of the workshop's overall theme. The topic of each session will be introduced by a chairperson, followed by oral presentations that will be selected based on papers submitted to the Scientific Secretary. Each session will comprise a common discussion.

Finally, during the concluding session, the respective chairpersons will summarize their sessions. After the workshop, the IAEA and the NEA will jointly consolidate and publish the event findings, conclusions and recommendations of the event.

Topics

The main theme of the workshop will be devoted to discussing and comparing the various measures that have been put in place and any difficulties encountered during their development or deployment, identifying, where possible, good practices. Specific themes of the workshop will be

- Identify measures developed to detect and mitigate OPC;
- Share experiences gained in the development and operation of such systems in the detection and operation of these measures;
- Identify any good practices in the development and operation of these measures.

Participation and Registration

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State, participants are requested to send the **Participation Form (Form A)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA by **30 September 2020**. Participants who are members of an organization invited to attend are requested to send the Participation Form (Form A) through their organization to the IAEA by above deadline.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and technical matters.

Presentations

The IAEA encourages participants to give presentations on the work of their respective institutions that falls under the topics listed above.

Participants who wish to give presentations are requested to indicate their intention in the **Participation Form (Form A)**.

Presentations must last no more than 15 minutes and will be followed by further five-minute discussion. They should be sent electronically in PowerPoint format to the Scientific Secretary of the event (see contact details below) not later than **16 October 2020**.

Additional Information

The event will be conducted via Cisco WebEx from 27 to 29 October 2020. The event agenda and the information on how to connect, time frame and time window of the sessions during the virtual workshop will be sent to the designated participants per email.

IAEA Contacts

Scientific Secretary:

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretary and correspondence on other matters related to the event to the Administrative Secretary.

Event Web Page

Please visit the following IAEA web page regularly for new information regarding this event:

www.iaea.org/events/EVT1904966

Participation Form

Joint IAEA–NEA Workshop on the Current Implementation Status of Measures to Manage Open Phase Conditions in Electrical Power Systems of Nuclear Power Plants

Virtual Event

27–29 October 2020

To be completed by the participant and sent to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA) either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary A.Duchac@iaea.org and to the Administrative Secretary M.Waititu-Dibarbora@iaea.org.

Please attach a passport copy or other document of identification (ID).

Participants who are members of an invited organization can submit this form to their organization for subsequent transmission to the IAEA.

Deadline for receipt by IAEA through official channels: 30 September 2020

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms
Institution:		
Full address:		
Tel. (Fax):		
Email:		
Nationality:	Representing following Member State/non-Member State/entity or invited organization:	
If/as applicable: Do you intend to make an electronic presentation? Yes <input type="checkbox"/> No <input type="checkbox"/> Title:		