



Interregional Training Course on Electrical Grid Considerations and Interactions with the Nuclear Power Plant

Hosted by

The Government of the United States of America

through the

Argonne National Laboratory
Lemont, United States of America

18 to 22 October 2021

Ref. No.: TN-INT2021-EVT2100125

Information Sheet

Purpose

The purpose of the event is to train participants from Member States, which are considering a nuclear power programme or preparing to invite bids or negotiate a contract for a nuclear power plant (NPP), on the updated guidance and international experience related to power system performance requirements for NPPs, connection to and operation of electrical grid and interface between electrical grids and NPPs.

Working Language(s)

The working language of the event will be English

Deadline for Nominations

The deadline for nomination is **1 August 2021**.

Expected Outputs

This training course will provide information, guidance, tools and practical experience on:

- NPP output and capacity integration into the grid;
- Evaluation of power network stability;
- Connecting NPPs to the national and regional power systems;
- Grid reliability for and with NPP operation

Scope and Nature

This training course will be based on guidance and materials developed for Member States including IAEA Nuclear Energy Series No. NG-T-3.2 (Rev. 1) “Evaluation of the Status of National Infrastructure Development” and IAEA Nuclear Energy Series No. NG-T-3.8 “Electric Grid Reliability and Interface with Nuclear Power Plants”. The IAEA’s specific safety requirements related to the design of nuclear power plants, IAEA Safety Standards Series No. SSR-2/1 (Rev. 1), as referenced in Action 171 of IAEA Safety Standards Series No. SSG-16 will also be incorporated into the training materials.

The training course will include presentations, interactive activities, a technical tour and peer-to-peer information exchange. International experts as well as IAEA staff will present and share their experience, highlighting common challenges and good practices.

Participation

The training course is open to a maximum of 20 participants from the following countries:

Algeria, Bolivia, Chile, El Salvador, Ethiopia, Ghana, Indonesia, Jordan, Kazakhstan, Kenya,

Morocco, Niger, Nigeria, Philippines, Poland, Saudi Arabia, Senegal, Sri Lanka, Sudan, Thailand, Tunisia, Uganda, Uzbekistan, Zambia.

Participants' Qualifications and Experience

This course is targeted to relevant staff members in the Member States' grid/transmission system operators, governments/nuclear energy programme implementing organizations (NEPIOs) or prospective owner/operator organizations, particularly those with responsibility for providing analyses of grid capability and reliability to take the output from an NPP, ability to withstand loss of output, reliability to minimize the risk of loss of power to the NPP from the grid, and enhancements needed to achieve grid stability and reliability requirements to allow safe and efficient operation of an NPP. Grid/transmission system regulators and relevant staff from nuclear regulatory authorities are also welcome to apply. Individuals who have participated in a similar event in the last three years, should not be nominated to participate in this event.

Participants are encouraged to complete the following IAEA E-Learning Module before joining the course:

- **Implementing a Nuclear Power Programme**
https://nucleus.iaea.org/sites/connect-members/cbh/publicpages/E_Learning_Modules/01/Default.htm

Application Procedure

Candidates wishing to apply for this event should follow the steps below:

1. Access the InTouch+ home page (<https://intouchplus.iaea.org>) using the candidate's existing Nucleus username and password. If the candidate is not a registered Nucleus user, she/he must create a Nucleus account (<https://websso.iaea.org/IM/UserRegistrationPage.aspx>) before proceeding with the event application process below.
2. On the InTouch + platform, the candidate must:
 - a. Finalize or update her/his personal details, provide sufficient information to establish the required qualifications regarding education, language skills and work experience ('Profile' tab) and upload relevant supporting documents;
 - b. Search for the relevant technical cooperation event (EVT2100125) under the 'My Eligible Events' tab, answer the mandatory questions and lastly submit the application to the required authority.

NOTE: Completed applications need to be approved by the relevant national authority, i.e. the National Liaison Office, and submitted to the IAEA through the established official channels by the provided designation deadline.

For additional support on how to apply for an event, please refer to the [InTouch+ Help page](#). Any issues

or queries related to InTouch+ can be addressed to InTouchPlus.Contact-Point@iaea.org.

Should online application submission not be possible, candidates may download the nomination form for the training course from the [IAEA website](#).

NOTE: A medical certificate signed by a registered medical practitioner dated not more than four months prior to starting date of the event must be submitted by candidates when applying for a) events with a duration exceeding one month, and/or b) all candidates over the age of 65 regardless of the event duration.

Administrative and Financial Arrangements

Nominating authorities will be informed in due course of the names of the candidates who have been selected, and will at that time be informed of the procedure to be followed with regard to administrative and financial matters.

Selected participants will receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses. They will also receive either a round-trip air ticket based on the most direct and economical route between the airport nearest their residence and the airport nearest the duty station through the IAEA's travel agency American Express, or a travel grant, or they will be reimbursed travel by car/bus/train in accordance with IAEA rules for non-staff travel.

Disclaimer of Liability

The organizers of the event do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the course, and it is clearly understood that each Government, in approving his/her participation, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.

Note for female participants

Any woman engaged by the IAEA for work or training should notify the IAEA on becoming aware that she is pregnant.

The Board of Governors of the IAEA approved new International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Standards deal specifically with the occupational exposure conditions of female workers by requiring, inter alia, that a female worker should, on becoming aware that she is pregnant, notify her employer in order that her working conditions may be modified, if necessary. This notification shall not be considered a reason to exclude her from work; however, her working conditions, with respect to occupational exposure shall be adapted with a view to ensuring that her embryo or foetus be afforded the same broad level of protection as required for members of the public.

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