

# Interregional Training Course on the Preparedness of the Owner/Operator Organization for Construction and for Operation

#### Hosted by

The Government of the Russian Federation

#### through the

State Atomic Energy Corporation 'Rosatom'

Moscow, Russian Federation

5 to 9 September 2022

Ref. No.: TN-INT2021-2201724

# **Information Sheet**

## **Purpose**

The purpose of the event is to train the participants from Member States embarking on new nuclear power programmes and those considering expanding their existing programme, on guidance in international experience and good practices related to the establishment of a knowledgeable and competent owner/operator organization for construction, commissioning and operation of a nuclear power plant (NPP) in line with the guidance provided by the IAEA

# **Working Language(s)**

The working language of the event will be English.

#### **Deadline for Nominations**

Nominations received after 25 July 2022 will not be considered.

#### **Scope and Nature**

This event will focus on the owner/operator organisation roles and responsibilities in the planning for construction and overseeing the EPC contractor, as well as preparing the organization for operation.

The training course will mainly consist in a series of presentations delivered by IAEA staff, international experts, and experts from the Russian Federation. The programme will also include discussions, case studies and exercises, peer-to-peer exchange of good practices, and working group sessions on related topical issues.

The training course will also include a technical tour to nuclear facility.

In addition, the training course will provide opportunities for participants to network and continue sharing information and good practices as well as other potential follow-up tasks and coordinated activities, as appropriate.

#### **References:**

The following IAEA publications provide relevant information to Member States:

- 1 INTERNATIONAL ATOMIC ENERGY AGENCY, Milestones in the Development of a National Infrastructure for Nuclear Power, Nuclear Energy Series No. NG-G-3.1 (Rev. 1), IAEA, Vienna (2015).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Initiating Nuclear Power Programmes: Responsibilities and Capabilities of Owners and Operators, Nuclear Energy Series No. NG-T-3.1 (Rev. 1), IAEA, Vienna (2020).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Licensing Process for Nuclear Installations, IAEA Safety Standards Series No. SSG-12, IAEA, Vienna (2010).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Managing Environmental Impact Assessment for Construction and Operation in New Nuclear Power Programmes, IAEA Nuclear Energy Series No. NG-T-3.11, IAEA, Vienna (2014)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Management of Nuclear Power Plant Projects, Nuclear Energy Series No. NG-T-1.6, IAEA, Vienna (2020).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Construction for Nuclear Installations, IAEA Safety Standards Series No. SSG-38, IAEA, Vienna (2015)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Project Management in Nuclear Power Plant Construction: Guidelines and Experience, IAEA Nuclear Energy Series No. NP-T-2.7, IAEA, Vienna (2012)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Construction Technologies for Nuclear Power Plants, IAEA Nuclear Energy Series No. NP-T-2.5, IAEA, Vienna (2011)
- INTERNATIONAL ATOMIC ENERGY AGENCY, International Safeguards in Nuclear Facility Design and Construction, IAEA Nuclear Energy Series No. NP-T-2.8, IAEA, Vienna (2013)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Commissioning for Nuclear Power Plants, IAEA Safety Standards Series No. SSG-28, IAEA, Vienna (2014)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Commissioning Guidelines

- for Nuclear Power Plants, IAEA Nuclear Energy Series No. NP-T-2.10, IAEA, Vienna (2018)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Recruitment, Qualification and Training of Personnel for Nuclear Power Plants, IAEA Safety Standards Series No. NS-G-2.8, IAEA, Vienna (2002).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Safety of Nuclear Power Plants: Commissioning and Operation IAEA Safety Standards Series No. SSR-2/2 (Rev.1), IAEA, Vienna (2016)
- INTERNATIONAL ATOMIC ENERGY AGENCY, Leadership and Management for Safety, IAEA Safety Standards Series No. GSR Part 2, IAEA, Vienna (2016).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Safety Assessment for Facilities and Activities, IAEA Safety Standards Series No. GSR Part 4 (Rev.1), IAEA, Vienna (2016).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Application of the Management System for Facilities and Activities, IAEA Safety Standards Series No. GS-G-3.1, IAEA, Vienna (2006).
- INTERNATIONAL ATOMIC ENERGY AGENCY, The Management System for Nuclear Installations, IAEA Safety Standards Series No. GS-G-3.5, IAEA, Vienna (2009).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Modifications to Nuclear Power Plants, IAEA Safety Standards Series No. SSG-71, IAEA, Vienna (2022).
- INTERNATIONAL ATOMIC ENERGY AGENCY, The Operating Organization for Nuclear Power Plants, IAEA Safety Standards Series No. SSG-72, IAEA, Vienna (2022).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Maintenance, Testing, Surveillance and Inspection in Nuclear Power Plants, IAEA Safety Standards Series No. SSG-74, IAEA, Vienna (2022).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Recruitment, Qualification and Training of Personnel for Nuclear Power Plants, IAEA Safety Standards Series No. SSG-75, IAEA, Vienna (2022).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Conduct of Operations at Nuclear Power Plants, IAEA Safety Standards Series No. SSG-76, IAEA, Vienna (2022).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Protection against Internal and External Hazards in the Operation of Nuclear Power Plants, Safety Standards Series No. SSG-77, IAEA, Vienna (2022).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Development and Application of Level 1 Probabilistic Safety Assessment for Nuclear Power Plants, IAEA Safety Standards Series No. SSG-3, IAEA, Vienna (2010).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Periodic Safety Review of Nuclear Power Plants, IAEA Safety Standards Series No. SSG-25, IAEA, Vienna (2013).

- INTERNATIONAL ATOMIC ENERGY AGENCY, Operational Limits and Conditions and Operating Procedures for Nuclear Power Plants, IAEA Safety Standards Series No. SSG-70, IAEA, Vienna (2022).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Core Management and Fuel Handling for Nuclear Power Plants, IAEA Safety Standards Series No. SSG-73, IAEA, Vienna (2022).
- INTERNATIONAL ATOMIC ENERGY AGENCY, INTERNATIONAL LABOUR ORGANIZATION, Occupational Radiation Protection IAEA Safety Standards Series No. GSG-7, IAEA, Vienna (2018).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Safety Classification of Structures, Systems and Components in Nuclear Power Plants, IAEA Safety Standards Series No. SSG-30, IAEA, Vienna (2014).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Predisposal Management of Radioactive Waste from Nuclear Power Plants and Research Reactors, IAEA Safety Standards Series No. SSG-40, IAEA, Vienna (2016).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Aging Management and Development of a Programme for Long Term Operation of Nuclear Power Plants, IAEA Safety Standards Series No. SSG-48, IAEA, Vienna (2018).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Operating Experience Feedback for Nuclear Installations, IAEA Safety Standards Series No. SSG-50, IAEA, Vienna (2018).
- INTERNATIONAL ATOMIC ENERGY AGENCY, OSART Guidelines, IAEA Service Series No. 12 (Rev 1), Vienna (2016).

# **Expected outputs**

The expected outputs of the training course are that the NEPIO, Owner/Operators, or decision makers that will be involved in a future Owner/Operator Organization, understand their roles and responsibilities in preparing for construction of a nuclear power plant, in implementing oversight processes and programmes, and in preparing the organization for commissioning and operation.

## **Participation**

The event is open to 20 participants from the following Member States participating in the INT/2/021:

Argentina, Armenia, Bangladesh, Belarus, Brazil, Bulgaria, Czech Republic, Egypt, Ghana, Hungary, Iran, Jordan, Kenya, Mexico, Nigeria, Pakistan, Poland, Romania, Saudi Arabia, Slovakia, South Africa, Türkiye, UAE, Uzbekistan.

## Participants' Qualification and Experience

The training course is designed for professionals from expanding and active newcomer countries, specifically in the preparatory work for licensing, contracting and construction of NPPs. Applicants should be from NEPIOs, owner/operating organizations (utility/headquarters) or decision makers from other relevant institutions involved in the nuclear power programme. The candidates should have at least 2 years of experience developing nuclear power programmes. Excellent English-language skills are necessary.

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

- Construction Management
   <a href="https://nucleus.iaea.org/sites/connect-members/cbh/publicpages/E\_Learning\_Modules/05/Default.htm">https://nucleus.iaea.org/sites/connect-members/cbh/publicpages/E\_Learning\_Modules/05/Default.htm</a>
- Culture for Safety
   <a href="https://nucleus.iaea.org/sites/connect-members/cbh/publicpages/E-Learning-Modules/16/Default.htm">https://nucleus.iaea.org/sites/connect-members/cbh/publicpages/E-Learning-Modules/16/Default.htm</a>
- Management System
   <u>https://nucleus.iaea.org/sites/connect-members/cbh/publicpages/E\_Learning\_Modules/08/Default.htm</u>

## **Application Procedure**

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

- 1. Access the InTouch+ home page (<a href="https://intouchplus.iaea.org">https://intouchplus.iaea.org</a>) 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 (<a href="https://websso.iaea.org/IM/UserRegistrationPage.aspx">https://websso.iaea.org/IM/UserRegistrationPage.aspx</a>) 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 (EVT2201724) 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. **All nominations must include a scan of the candidate's first page of passport with photo.** 

For additional support on how to apply for an event, please refer to the <u>InTouch+ Help page</u>. Any issues or queries related to InTouch+ can be addressed to <u>InTouchPlus.Contact-Point@iaea.org</u>.

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.

#### **Training on Basic Security in the Field (BSITF)**

In order to comply with UN system-wide security measures, it is required that all training course participants complete the online security awareness training BSAFE (which replaces BSITF and ASITF), prior to traveling to locations where UN security phases are in effect. The aim of these course is to educate participants on how best to avoid or minimize potential dangers and threats, and to demonstrate what individuals can do if they find themselves in insecure situations. The course is available online (https://training.dss.un.org/course/category/6).

Once an individual has completed the training, he/she must go back to the main training page to receive the certificate. If the button to get the certificate is not immediately visible, please refresh the page. BSAFE is maintained by UNDSS; in case of problems with the system, please contact UNDSS through the "Contact Us" page on the training website (<a href="https://dss.un.org/dssweb/contactus.aspx">https://dss.un.org/dssweb/contactus.aspx</a>).

This certificate is compulsory for any IAEA-supported activity and should be submitted, along with the Nomination Form, through the competent authority in your country (NLO). Copies of the certificate should be kept by the candidate for his/her records as the BSAFE certificate does not expire.

#### **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.

**NOTE:** The event will be hosted by the Russian Federation, therefore nominated participants who require a visa to enter the Russian Federation should submit the necessary application to the nearest diplomatic or consular representative of Russian Federation as soon as possible.

## **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.

# **Programme Management Officer**

Mr Jing Zhang
Division for Europe
Department of Technical Cooperation
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA

Tel.: +43 1 2600 26540 Fax: +43 1 26007

Email: J.Zhang@iaea.org

#### **Administrative Contact**

Mr Nikita Butakov Division for Europe Department of Technical Cooperation International Atomic Energy Agency Vienna International Centre PO Box 100 1400 VIENNA AUSTRIA

Tel.: +43 1 2600 21058 Fax: +43 1 26007

Email: N.Butakov@iaea.org