

Interregional Training Course on Licensing and Construction Preparation and Oversight of Nuclear Power Plants

Hosted by

The Government of the Republic of Korea

through the

KEPCO International Nuclear Graduate School (KINGS)

Ulsan, Republic of Korea

29 May - 9 June 2023

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Information Sheet

Purpose

The purpose of the event is to train participants on nuclear power plant licensing process and highlight the key activities to be performed by the regulatory body and the owner/operator in preparing for and overseeing construction. The 2-week training will cover several aspects related to the roles of these two main organizations during the licensing process.

Working Language(s)

The working language of the event will be English.

Deadline for Nominations

Nominations received after 28 April 2022 will not be considered.

Project Background

The use of nuclear power as a source of energy is increasing globally, with many countries introducing or expanding their nuclear power programmes. Such programmes require a long-term commitment and a national nuclear infrastructure that provides governmental, legal, regulatory, institutional, managerial, technological, human resource, industrial and stakeholder support throughout its life cycle. The adherence to international legal instruments, and the adoption of internationally accepted nuclear safety standards, nuclear security guidance and safeguards requirements are essential in establishing a responsible nuclear power programme. It is each country's sovereign decision whether to include nuclear power in its national energy mix. However, when countries proceed with this option, the IAEA is ready to support them through a variety of activities and services to do so safely, securely and sustainably.

Currently, the IAEA provides nuclear infrastructure development training to its Member States through a number of mechanisms. Through the Technical Cooperation programme, Member States benefit from training at the national, regional and interregional level. The majority of the training provided on the introduction of nuclear power is general in nature and cuts across the 19 infrastructure issues. In this respect, the interregional projects are an important mechanism, delivering support across national and regional boundaries and addressing the common needs of different regions. The interregional approach through INT2021 – NPID is then necessary to streamline the IAEA support in this area.

Scope and Nature

KEPCO International Nuclear Graduate School (KINGS) is an educational institute established to cultivate leadership-level professionals in planning, design, construction, operation and management of NPPs. A significant contribution to the training course implementation will be made by the invited domestic experts, international experts and IAEA staff who will present fundamentals, as well as share their experiences and insights gained by the performance of these activities. The IAEA and KINGS will possibly arrange participants for technical tours. The first week will focus on the owner/operator organisation roles and responsibilities in planning construction and overseeing the EPC contractor. The second week will address the roles and responsibilities of the regulatory body during the licensing processes up to the start of the commissioning and operation. The second week is mainly targeted to newcomer countries establishing or enhancing their regulatory framework and infrastructure, although expanding countries could benefit to a certain extent.

In addition, the training course will provide opportunities for participants to network and continue sharing information and good practices

References:

- 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, Functions and Processes of the Regulatory Body for Safety, IAEA Safety Standards Series No. GSG-13, IAEA, Vienna (2018).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Licensing Process for Nuclear Installations, IAEA Safety Standards Series No. SSG-12, IAEA, Vienna (2010).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Establishing the Safety Infrastructure for a Nuclear Power Programme, IAEA Safety Standards Series No. SSG-16, IAEA, Vienna (2012).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Experiences of Member States in Building a Regulatory Framework for the Oversight of New Nuclear Power Plants: Country Case Studies, IAEA-TECDOC-1948, IAEA, Vienna (2021).
- INTERNATIONAL ATOMIC ENERGY AGENCY, Management of Nuclear Power Plant Projects, Nuclear Energy Series No. NG-T-1.6, IAEA, Vienna (2020).

Expected outputs

The expected outputs of the training course are that:

- Owner/operators understand their roles and responsibilities in preparing for construction of a nuclear power plant and in implementing oversight processes and programmes.
- Regulatory body understands its roles and responsibilities regarding the licensing and regulatory oversight of NPPs.
- Participants have familiarized with the relevant key IAEA's publications which may help them further understand the roles and responsibilities of the two above organizations.

Participation

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

Argentina, Armenia, Bangladesh, Brazil, Bulgaria, Czech Republic, Egypt, Ghana, Hungary, Iran, Jordan, Kenya, Lithuania, Mexico, Nigeria, Pakistan, Poland, Romania, Saudi Arabia, Slovakia, Slovenia, South Africa, Türkiye and 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 government, owner/operating organizations (utility/headquarters), nuclear-related R&D institutes, or regulatory bodies. 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

https://nucleus.iaea.org/sites/connect-members/cbh/publicpages/E Learning Modules/05/Default.htm

• Culture for Safety

https://nucleus.iaea.org/sites/connectmembers/cbh/publicpages/E_Learning_Modules/16/Default.htm

• 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:

- 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 (EVT2301018) 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 <u>IAEA website</u>.

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 (https://dss.un.org/dssweb/contactus.aspx).

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.

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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