Interregional Training Course on Advanced Approaches in Financing Nuclear Power Plant (NPP) Projects
(EVT1900193)

Information Sheet

Project Number & Title: INT/2/018 – Supporting Knowledgeable Decision-making and Building Capacities to Start and Implement Nuclear Power Programmes

Place (City, Country): Argonne National Laboratory, Lemont, Illinois, USA

Dates: 15 – 19 July 2019

Deadline for Nominations: 6th May 2019

Organizers: The International Atomic Energy Agency (IAEA) in collaboration with the Government of USA through the Argonne National Laboratory, Lemont, Illinois, USA.

Host Country Organizer:
Course Director: Ms Sunaree Hamilton, Ph.D.
Program Manager
IAEA Programs
Argonne National Laboratory
Phone: 630.252.1050
E-mail: Shamilton@anl.gov
Website: http://international.anl.gov

IAEA Staff:
Technical Officer:
Mr Sean Dunlop
Nuclear Infrastructure Development Section
Department of Nuclear Energy
International Atomic Energy Agency
Tel: +43 1 2600 22890
E-mail: S.Dunlop@iaea.org

Programme Management Officer:
Mr Gashaw Gebeyehu Wolde
Asia and Pacific Division
Department of Technical Cooperation
International Atomic Energy Agency
Tel: +43 1 2600 25985
E-mail: G.G.Wolde@iaea.org
The training course will be conducted in English.

The objective of this training course is to support decision makers and those responsible for developing and implementing a nuclear programme in Member States considering the introduction of nuclear power (including States in Phases 1, 2 and 3) to improve the knowledge and develop the skills and abilities needed for success in the introduction of nuclear power, with emphasis on issues relating the financing of nuclear power plants.

The expected outputs of the training course are:

- Improved ability to address the challenges and issues relating to building a national position and financing nuclear power plants;
- Better knowledge of NPP financing and funding options as well as procurement structures and better understand of contracting mechanisms including Engineering, Procurement and Construction (EPC) contracting.
- Improved knowledge of financial risks, economics of nuclear power, and market regulations and better understanding of alternative financing mechanisms.
- Enhanced networking opportunities among participants.

Courses activities will revolve around three major inter-related objectives:

(i) providing knowledge of key issues a State has to consider when establishing a nuclear power programme, specifically financing options and strategies; (ii) presentation of case studies of countries that have recently completed or are now in the process of making financial arrangements; (iii) further strengthening the networking among emerging nuclear power countries and sharing international and field experiences.

The training course will cover financial issues, including alternative contracting and ownership approaches for nuclear power programmes. It will include a brief refresher on key qualitative financial metrics, the outlining of a general framework within which the importance of optimal financial risk allocation can be understood, and presentations on the role of financial modelling.

The 5 days training course will be divided into 10 course modules:

Module 1: Key concepts and metrics for financing decision-making
Module 2: Financing and risk allocation in nuclear power projects
Module 3: Risk allocation in commercial contracts (PPAs and EPCs)
Module 4: Sources and structures of financing (debt vs equity)
Module 5: Satisfying lenders and investors (due diligence, reputational risk, etc.)
Module 6: Case studies
Module 7: Financial modelling
Module 8: Funding “back-end” liabilities

The course will be conducted as a series of presentations by the IAEA staff, international experts, management and technical specialists of the Argonne National Laboratory, the United States and other countries. The programme will also include discussions, case studies and exercises, peer-to-peer exchange of good practices, and working group sessions on possible solutions to common problems.

In addition, the course will discuss 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:
• Alternative Contracting and Ownership Approaches for Nuclear Power Plants, IAEA TECDOC 1750, 2014
• IAEA Nuclear Energy Series No. NG-T-3.1, “Initiating Nuclear Power Programmes: Responsibilities of Owner and Operators”
• IAEA Nuclear Energy Series No. NG-T-4.1, “Issues to Improve the Prospectus of Financing Nuclear Power Plants”
• IAEA Nuclear Energy Series No. NG-T-4.2, “Financing New Nuclear Power Plants”
• Working Document on “Establishment of a National Position for a New Nuclear Power Programme:

Background Information:

Developing a nuclear power programme is a major undertaking that involves many complex and interrelated activities with a long duration — usually about 10 to 15 years - leading up to start of operation of the first nuclear power plant. The increased interest in nuclear power in a significant number of countries has prompted the IAEA to organize since 2009, a workshop on leadership and management of nuclear power in Argonne. The related workshops that were held in 2009, 2010, 2011, 2012, 2013, 2014, 2015 and 2017 were attended by representatives of more than 20 Member States from Africa, Asia, Europe and Latin America. These workshops, in addition to other workshop events, were very useful in supporting newcomer countries to develop skills and relationships in connection with the development of their nuclear power programmes.

Among other recommendations made during these workshop events, the IAEA was requested to give special emphasis on key threshold issues for the introduction of nuclear power, specifically approaches for financing the first nuclear power plant.

Participation:
The training course is open to 25 participants.

Participants’ Qualifications:
The target audience of this training course are management system managers, management system specialists or project managers from future owner-operator organizations and regulatory bodies. Individuals should have direct responsibilities related to the establishment or performance of the country’s management system for its nuclear power programme. Individuals who participated in this course in the past years should not apply.

Target Countries:
Algeria, Argentina, Armenia, Bangladesh, Belarus, Bolivia, Brazil, Bulgaria, Chile, Czech Republic, Egypt, Ghana, Hungary, Indonesia, Jordan, Kazakhstan, Kenya, Lithuania, Malaysia, Mexico, Morocco, Niger, Nigeria, Pakistan, Philippines, Poland, Romania, Saudi Arabia, Senegal, Slovakia, Sri Lanka, South Africa, Thailand, Tunisia, Turkey, Uganda, UAE, Uzbekistan, Viet Nam and Zambia.

Nomination Procedure:
Nominations should be submitted to the IAEA online through the Technical Cooperation Department InTouch+ system (http://intouchplus.iaea.org) under event EVT1900193. Should this not be possible, nominations may be submitted on a standard IAEA Application for Training Courses (available on the IAEA web-site https://www.iaea.org/services/technical-cooperation-programme/how-to-participate) with reference to EVT1900193. Completed forms should be endorsed by relevant
national authorities and returned to the Agency at Official.Mail@iaea.org through official channels, i.e. the Office of the National Liaison Office.

The completed nomination forms should be sent to Mr Gashaw Wolde (G.G.Wolde@iaea.org), Ms Daniela Izabal Nogueda (d.izabal-nogueda@iaea.org), Osama Nabahin (O.Nabahin@iaea.org) and IAEA Official Mail E-Mail (Official.Mail@iaea.org) through the IAEA Nuclear Liaison Officer (NLO) no later than 6 May, 2019. Nominations received after this date cannot be considered.

All nominations must include a scan of the candidate’s first page of passport with photo.

**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:**

This training course is funded by the United States of America.

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

Selected participants from countries eligible to receive technical assistance will be provided with a round trip economy class air ticket from their home countries to Chicago, USA, and a stipend sufficient to cover the cost of their accommodation, food, and minor incidentals. Shipment of accumulated training materials to the participants’ home countries is not the responsibility of the IAEA. Countries in a position to do so are expected to make a cost-sharing contribution for their participation.

The organizers of the training course 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 training, and it is clearly understood that each Government, in nominating participants, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.