



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

**International Symposium on the Deployment of
Floating Nuclear Power Plants –
Benefits and Challenges**

IAEA Headquarters

Vienna, Austria

14–15 November 2023

Organized by the

International Atomic Energy Agency (IAEA)

Announcement

A. Background

Achieving net zero carbon emissions by 2050 will require large scale deployment of all low carbon energy sources, including nuclear power. Various studies confirm that nuclear power has a significant role to play in combating climate change and meeting increasing energy demand worldwide, but this will require that nuclear power plants be deployed at a larger scale than is currently the case.

There is increasing interest from Member States and industry to consider floating nuclear power plants (FNPPs) for a variety of needs that include providing electricity as well as non-electric applications such as desalination and the production of hydrogen for use in the fabrication of synthetic fuels for the transportation sector.

While the concept of FNPPs is not new, it has been gaining momentum in recent years. The Russian Federation started commercial operation of an FNPP in 2020 and several organizations in countries such as China, Denmark and Republic of Korea are developing FNPPs and some Members States are considering deploying them.

Past and current deployments took place nationally in countries with the necessary technical, industrial and institutional infrastructure to build, license and deploy FNPPs in their territorial waters. The international deployment of FNPPs offers new opportunities but also presents challenges, including the evaluation of international and national legal issues and institutional aspects.

In 2013¹, the IAEA completed a preliminary study on transportable nuclear power plants (TNPPs) that included consideration of FNPPs deployed in coastal areas. There is interest in other modes of deployment including further from the shoreline — but still in territorial waters — as well as in international waters. This Symposium will consider all potential deployments of FNPPs and the associated institutional and legal challenges.

B. Purpose and Objectives

The purpose of the event is to explore and discuss the potential deployment of FNPPs to enhance the contribution of nuclear energy to achieving net zero carbon emissions. It will focus on different aspects of FNPPs, ranging from their national deployment in territorial waters to more challenging applications that require the transport of fuelled FNPPs to other countries or their deployment in international waters.

The Symposium's specific objectives are as follows:

- Review past and present experiences in deploying FNPPs, including overview of current development activities
- Discuss the life cycle of FNPPs with a focus on shipyard production and deployment scenarios
- Explore and discuss the feasibility of FNPP deployment: 1) in territorial waters — near and away from the shoreline — and 2) in international waters
- Examine legal aspects (safety, security, safeguards, liability) with a focus on legally binding instruments in place with consideration of, as appropriate, international standards (e.g., applicability of IAEA safety standards), guidance (e.g., applicability of IAEA security guidance documents), norms and best practices that facilitate compliance with such instruments

¹ [Legal and Institutional Issues of Transportable Nuclear Power Plants: A Preliminary Study | IAEA](#). A follow-up study on factory fuelled TNPPs is nearing completion.

- Examine challenges related to licensing and regulation in scenarios where FNPPs are constructed and commissioned in one country and then exported/transported to another country
- Discuss and propose further actions by the international community to facilitate the expanded safe, secure and sustainable use of FNPPs for peaceful applications

C. Themes and Topics

Past, current and potential future applications

- National deployment experiences
- Overview of national development activities
- Potential future FNPP deployment scenarios
- Production of FNPPs using existing shipyards

Legal aspects — Safety, Security, Safeguards and Liability

- Deployment in territorial waters (close to shore and further off shore)
- Deployment in international waters
- Licensing, regulation and transport of fuelled FNPPs
- Applicability of international standards and guidance (e.g., IAEA safety standards and security guidance documents)
- Application of safeguards

Further Actions

- Role of proponents and Member States
- Role of international organizations

D. Structure

The Symposium will consist of a technical session followed by questions and answers and a number of panel discussions.

The technical session, taking place on the first day, will be used primarily to present an overview of past and current FNPP development and deployment as well as the views of proponents and Member States regarding opportunities to expand the use of FNPPs for a variety of applications. Presentations on legal considerations (safety, security, safeguards and liability) will follow to provide an overview of potential challenges for the identified new deployment scenarios, particularly those related to licensing and regulation, transport, and application of safeguards. Invited speakers and presentations will set the stage for the panel discussions taking place the following day.

The second day will consist of focused panel discussions related to the issues of safety, security and safeguards, including applicability of current standards and practices to FNPP deployment scenarios. The closing panel will discuss and summarize the main conclusions of the symposium, including proposed actions to facilitate deployment of FNPPs.

E. Expected Outcomes

Documentation of the main insights and conclusions as well as further actions to facilitate deployment of FNPPs.

F. Target Audience

Experts from research institutes and the private sectors, decision makers and leaders of national and international organizations with interest in the deployment of FNPPs.

G. Participation and Registration

All persons wishing to participate in the event must be designated by an IAEA Member State or should be a member of an organization that has been invited to attend.

Registration through the InTouch+ platform:

1. Access the InTouch+ platform (<https://intouchplus.iaea.org>):

- Persons with an existing NUCLEUS account can [sign in here](#) with their username and password;
- Persons without an existing NUCLEUS account can [register here](#).

2. Once signed in, prospective participants can use the InTouch+ platform to:

- Complete or update their personal details under ‘Basic Profile’ (if no financial support is requested) or under ‘Complete Profile’ (if financial support is requested) and upload the relevant supporting documents;
- Search for the relevant event (**EVT2303154**) under the ‘My Eligible Events’ tab;
- Select the Member State or invited organization they want to represent from the drop-down menu entitled ‘Designating authority’ (if an invited organization is not listed, please contact Conference.Contact-Point@iaea.org);
- If applicable, indicate whether financial support is requested and complete the relevant information (this is not applicable to participants from invited organizations);
- Based on the data input, the InTouch+ platform will automatically generate Participation Form (Form A) and/or Grant Application Form (Form C);
- Submit their application.

Once submitted through the InTouch+ platform, the application together with the auto-generated form(s) will be transmitted automatically to the required authority for approval. If approved, the application together with the form(s) will automatically be sent to the IAEA through the online platform.

NOTE: Should prospective participants wish to request financial support, the application needs to be submitted by the specified deadlines (see section L).

For additional information on how to apply for an event, please refer to the [InTouch+ Help](#) page. Any other issues or queries related to InTouch+ can be sent to InTouchPlus.Contact-Point@iaea.org.

If it is not possible to submit the application through the InTouch+ platform, prospective participants are requested to contact the IAEA's Conference Services Section via email: Conference.Contact-Point@iaea.org.

Participants are hereby informed that the personal data they submit will be processed in line with the [Agency's Personal Data and Privacy Policy](#) and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.

H. Expenditures and Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the symposium. The IAEA has, however, limited funds at its disposal to help cover the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the symposium.

If participants wish to apply for a grant, they should submit applications to the IAEA using the InTouch+ platform through their competent national authority (see Section G). Participants should ensure that applications for grants are:

1. Submitted by **1 September 2023**;
2. Accompanied by Grant Application Form (Form C); and
3. Accompanied by Participation Form (Form A).

Applications that do not comply with the above conditions cannot be considered.

Approved grants will be issued in the form of a lump sum payment that usually covers **only part of the cost of attendance**.

I. Working Language

The working language of the symposium will be English. All communications must be sent to the IAEA in English.

J. Venue and Accommodation

The symposium will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. Participants are advised to arrive at Checkpoint 1/Gate 1 of the VIC one hour before the start of the event on the first day in order to allow for timely registration. Participants will need to present an official photo identification document in order to be admitted to the VIC premises.

Participants must make their own travel and accommodation arrangements. Hotels offering a reduced rate for participants are listed on <https://www.iaea.org/events>. Please note that the IAEA is not in a

position to assist participants with hotel bookings, nor can the IAEA assume responsibility for paying fees for cancellations, re-bookings and no-shows.

K. Visas

Participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria as early as three months but not later than four weeks before they travel to Austria. Since Austria is a Schengen State, persons requiring a visa will have to apply for a Schengen visa. In States where Austria has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Austria in the country in question.

For more information, please see the Austria Visa Information document available on <https://www.iaea.org/events>.

L. Key Deadlines and Dates

Submission of Form C (together with Form A) through the InTouch+ platform	1 September 2023
Submission of Form A only (no grant request) through the InTouch+ platform	10 November 2023

M. Symposium Secretariat

General Postal Address and Contact Details of the IAEA:

International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA
Tel.: +43 1 2600
Fax: +43 1 2600 2007
Email: Official.Mail@iaea.org

Scientific Secretaries of the Symposium:

Mr Hussam Khartabil
Department of Nuclear Energy
Division of Nuclear Power
Tel.: +43 1 2600 26932
Fax: +43 1 26007
Email: FNPP-2023@iaea.org

Mr David de Caires Watson

Department of Nuclear Security
Division of Nuclear Installation Safety
Tel.: +43 1 2600 25151
Fax: +43 1 26007
Email: FNPP-2023@iaea.org

Administration and Organization:

Ms Nancy Herter

Conference Services Section
Division of Conference and Document Services
Department of Management
IAEA-CN-330; EVT2303154
Tel.: +43 1 2600 21315
Email: Conference.Contact-Point@iaea.org

Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on administrative matters to the IAEA's Conference Services Section.

N. Symposium Web Page

Please visit the IAEA symposium [web page](#) regularly for new information regarding this symposium.