

Technical Meeting on Considerations for Coupling of Nuclear Cogeneration Facilities

IAEA Headquarters, Vienna, Austria and virtual participation via Microsoft Teams

27-29 August 2025

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Information Sheet

Introduction

Despite currently being a limited practice, the utilization of nuclear energy for cogeneration and applications beyond electricity has been successfully implemented in several Member States worldwide for many years, and there are now numerous projects in the planning and implementation phase. In addition, many countries, as well as industrial sectors, that have not included nuclear energy in their energy source planning before, are considering the benefits of this technology, and many research and development efforts are ongoing worldwide.

One of the challenges to using nuclear energy for applications beyond electricity that is still to be addressed relates to the integration of the selected application with the nuclear power plant, as well as the interface between the two facilities. When locating a nuclear facility close to an industrial process, the coupling between the facilities has to consider many aspects related to the interference and interactions between the facilities. There will be specific requirements determined by the reactor type, the nature of the non-electric application process, the separation distances of the application facility and the nuclear facility, and more.

This technical meeting is part of the continuing efforts of the IAEA to respond to a growing interest by Member States in this topic, and will assess specific considerations related to the implementation of using nuclear energy (including current reactor technologies, advanced reactors and small modular reactor technologies) for applications beyond electricity (including desalination plants, hydrogen production plants and various industrial processes) and collect, from existing nuclear cogeneration projects, best practices and procedures.

Objectives

The objectives of the event are the following:

- Discuss existing practices for coupling nuclear power plants with non-electric application plants;
- Assess gaps in guidance related to the interface between nuclear power plants and applications beyond electricity;
- Discuss and identify the technological advancements and solutions that are most suitable to increase development and implementation of using nuclear energy for applications beyond electricity; and
- Discuss the status, impediments and deployment indicators of worldwide projects on cogeneration.

Target Audience

The event is intended for project managers, decision makers, engineers and other stakeholders with relevant experience in nuclear cogeneration projects and R&D related to cogeneration and non-electric applications of nuclear energy, in Member States with existing, planned and considered facilities using nuclear energy for applications beyond electricity, including district heating, desalination, hydrogen production and direct use of nuclear heat for industrial applications.

Working Language(s)

English.

Expected Outputs

The main expected output of this meeting is to develop an understanding of the needs of Member States regarding the use of nuclear energy for applications beyond electricity, identify the gaps in guidance related to relevant considerations, provide a forum for exchange of information and identify potential future activities of the IAEA that could support Member State efforts in this area.

Participation and Registration

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State or invited organization, participants are requested to submit their application via the InTouch+ platform (https://intouchplus.iaea.org) to the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy

Authority) or organization for onward transmission to the IAEA by **20 June 2025** following the registration procedure in InTouch+:

- 1. Access the InTouch+ platform (https://intouchplus.iaea.org):
 - Persons with an existing NUCLEUS account can sign in to the platform 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 'Complete Profile' and upload the relevant supporting documents;
 - Search for the relevant event 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 InTouchPlus.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 the Participation Form (Form A) and/or the 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 applicable form(s), will automatically be sent to the IAEA through the online platform.

NOTE: The application for financial support should be made, together with the submission of the application, by 20 June 2025.

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

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and financial matters.

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. The IAEA may also use the contact details of Applicants to inform them of the IAEA's scientific and technical publications, or the latest employment opportunities and current open vacancies at the IAEA. These secondary purposes are consistent with the IAEA's mandate. Further information can be found in the Data Processing Notice concerning IAEA InTouch+ platform.

Papers and Presentations

The IAEA encourages participants to give presentations on the work of their respective institutions that falls under the topics listed above.

Participants who wish to give presentations are requested to submit an abstract of their work. The abstract will be reviewed as part of the selection process for presentations. The abstract should be in A4 page format, should extend to no more than 2 pages (including figures and tables). It should be sent

electronically to Ms Molly-Kate Gavello, the Scientific Secretary of the event (see contact details below), not later than **20 June 2025**. Authors will be notified of the acceptance of their proposed presentations by **9 July 2025**.

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 event. The IAEA has, however, limited funds at its disposal to help meet 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 event.

The application for financial support should be made, together with the submission of the application, by 20 June 2025.

Venue

The event will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. Participants must make their own travel and accommodation arrangements.

General information on the VIC and other practical details, such as a list of hotels offering a reduced rate for IAEA participants, are listed on the following IAEA web page:

www.iaea.org/events.

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.

Visas

Participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria at least 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.

IAEA Contacts

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretary/Secretaries and correspondence on other matters related to the event to the Administrative Secretary.