



Workshop on Ageing Management and Conditions Assessment of Specific Components in Nuclear Power Plants

Hosted by

Paks, Hungary

through the

Paks Nuclear Power Plant

Ref. No.: ME-RER2019-2406219

18-20 February 2025

Information Sheet

Purpose

The purpose of the event is to discuss and share experience on the Ageing Management (AM) and condition assessment of main components of Nuclear Power Plants (NPPs) such as Reactor Pressure Vessel (RPV), Steam Generators (SG), condenser tubes, pressurizer heaters, Diesel Generators, Main Motors and Main Pumps.

Working Language(s)

The working language(s) of the event will be English.

Deadline for Nominations

Nominations received after **13 December 2024** will not be considered.

Project Background

The project aims to comprehensively address aspects related to the operation of nuclear power plants (NPPs) beyond their existing long-term operation (LTO). It focuses on developing and enhancing capacities in the region, with a focus on the legal, technical, managerial, and research considerations, specifically covering challenges associated with the subsequent operation of NPPs beyond their existing LTO, such as maintenance effectiveness monitoring, ageing management, time limited ageing analysis management, technical obsolescence, spare part management, environmental risks, equipment reliability, knowledge management, preservation and retention, cycle fatigue calculations, embrittlement and irradiation issues, including their regulatory review, and human resources capacities, the use of advanced inspection topics, programmes and other aspects.

Previous IAEA TC projects, RER2012 (2016 2017) and RER2015 (2018 2022), have covered important aspects of LTO, including: (1) methodologies and techniques for the on-line monitoring of equipment performance (maintenance and qualification); (2) approaches in the field of passive components, resource evaluation and strength analyses; and (3) the regulatory requirements regarding LTO and regulatory oversight with regard to the subsequent period of LTO of NPPs. The current project RET2019 builds upon the knowledge gained and aims to further explore the safety aspects through a coordinated approach among Member States (MSs) and will concentrate on building and developing capacities with particular focus on the period beyond the existing LTO programmes.

The project is designed with a preliminary approach, allowing for a detailed analysis of the present LTO situation in the region, including the necessary identification of related technical issues, and the subsequent development of holistic approaches for possible extensions of existing LTO programmes which can be considered as a first phase.

Expected Outputs

The expected outputs of the workshop are the following:

- Improved understanding of the international requirements and guidelines on ageing management and long-term operation.
- Improved knowledge of proven practices on ageing management and condition assessment for mechanical components.

Participation

The meeting is open to 25 participants from Member States participating in the TC regional project RER2019. The Regional Workshop is meant for a team from each country consisting of up to 2 professionals from nuclear power plants (NPPs) and one regulator. Each country is invited to nominate three participants who must match the profile described in the corresponding paragraph.

Participants' Qualifications and Experience

The target audience of this workshop consists of officials involved in ageing management of nuclear power plants as well as related programmes as maintenance, in service inspections, surveillance, water chemistry, component's reliability and other programmes.

Structure

The event will cover current IAEA requirements and guidelines on scoping, ageing management review, including condition assessments, ageing management programmes, and other ageing related activities for main mechanical components of nuclear power plants.

1. Presentation on IAEA activities in LTO and AM:
 - a. IAEA Safety Standards related to LTO and AM;
 - b. IAEA requirement and guidance on Ageing management programmes, ageing management review, records and data management of ageing management activities.
2. Presentations on national approaches to:
 - a. AMPs and coordination with other plant programmes credited for Ageing management.
 - b. Condition assessment on main components of 'Water-Water Energy Reactor (VVER) type reactors.
 - c. Trending and measuring of effectiveness of ageing management activities.

Scope and Nature

This workshop focuses on sharing experiences and discussing proven practices on ageing management of main components of NPPs, focusing on VVER technology. The following topics will be covered:

1. Practical discussions of existing ageing management activities, Ageing Management Programmes (AMPs) for mechanical components, including interfaces with other plant programmes as maintenance, in-service inspections.
2. Practical discussion on aspects of technical condition assessment for ageing management review and coordination between AMPs and other plant programmes.
3. Review some examples and discussion of technical activities related to ageing management of mechanical components as Reactor Pressure Vessel (RPV), Steam Generators (SG), condenser tubes, pressurizer heaters, Diesel Generators, Main Motors and Main Pumps.
4. Improve awareness of and provide information for participant NPPs and regulatory authorities on IAEA safety standards on ageing management and long term operation.
5. Discuss documentation and records of results of ageing management activities, developed as part of AMPs or through other programmes.
6. Discuss potential ways to measure effectiveness and provide feedback to Ageing management activities.

The event will be conducted by the IAEA staff and qualified international experts.

Application Procedure

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

1. Access the IAEA TALEO page (<https://iaea.taleo.net/>) and complete the Candidate Profile.
2. Be registered on the Nucleus page of the IAEA (<https://nucleus.iaea.org/>).
3. Through Nucleus, access the InTouch+ platform where the Profile is completed (My Profile tab) (<https://nucleus.iaea.org/Pages/InTouchPlus.aspx>).
NOTE: The email used for TALEO and Nucleus must be the same. If not, the candidate's profile will not appear complete.
4. On the InTouch + platform, under the 'My InTouch +' tab, the candidate needs to:
 - a. select the institute / organization that he/she works at / represents ('My Institute' section);

- b. click on the link called '**Refresh Personal History Form**' to update the system, *otherwise the nominations submitted will have these fields empty and it will not be possible to evaluate them during the selection of candidates* ('IAEA Recruitment Platform' section).

NOTE: Once the above steps are finalized, the candidate's profile will appear as completed and he/she can apply for Technical Cooperation events.

5. In the InTouch+ platform (<https://intouchplus.iaea.org>), in the 'Applications' tab, search by the event number provided in the invitation.

The help for each step is located at the top of the page. For additional help on how to register, create a profile and apply for an event, please refer to the online guide and training videos available under the following links: [how-to guide](#) and [training videos](#). Any issues or queries related to the new system can be addressed to InTouchPlus.Contact-Point@iaea.org or TC-AIPS-PL4.Contact-point@iaea.org.

Should this not be possible, applicants may download the Nomination Form for the ME from the IAEA website <https://www.iaea.org/services/technical-cooperation-programme/how-to-participate>.

Applications should contain sufficient information to establish that the nominees have the required qualifications. Please note that the information regarding LANGUAGE SKILLS, EDUCATION AND WORK EXPERIENCE is exported from TALEO. If an applicant's profile in TALEO is not updated, the information in INTOUCH+ for these sections appears as empty and the candidates cannot be evaluated. Completed applications need to be endorsed by the relevant national authority, i.e. the National Liaison Office and submitted through the established official channels.

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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