



IAEA

International Atomic Energy Agency
Atoms for Peace and Development

Hybrid Event:

Technical Meeting on Good Practices in and Lessons Learned from the Long Term Operation of Nuclear Power Plants

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**The First Steering Committee Meeting of the International Network of Life
Management of Nuclear Power Plants (LMNPP Network)**

Hosted by the

Government of the Republic of Korea

through the

Korea Hydro & Nuclear Power Company Limited(KHNP)

Gyeongju-si, Republic of Korea

and virtual participation via Microsoft Teams

21–24 November 2023

Ref. No.: EVT2205157

Information Sheet

Introduction

Currently, over 260 GW(e) or 66% of operating nuclear capacity (293 of 440 reactors) is over 30 years old, and about 30% of reactors worldwide are already operating under Long Term Operation (LTO) conditions. To achieve the Net Zero Emission by 2050 goal and ensure energy security under the complicated geopolitical situation, LTO has become the prioritized option for more and more Member States (MS).

Diverse support mechanisms were used and through 2019 included the IAEA Technical Working Group on Life Management of Nuclear Power Plants. As an evolutionary step to continue the support, the IAEA officially launched the International Network on Life Management of Nuclear Power Plants (LMNPP Network) on the Technical Meeting (TM) on LMNPP Network in November 2022. The LMNPP Network has been established on the IAEA CONNECT platform to promote international cooperation, to increase efficiency in sharing international experience in life management of nuclear power plants, and to provide for various project-based Working Groups (WGs) to be formed to further support MS long term operation efforts and knowledge transfer.

At the aforementioned TM, participants welcomed and appreciated the new initiative from the IAEA. The overarching strategy of the LMNPP Network was discussed. It was also concluded that the LMNPP Network should have a Steering Committee (SC) made up of technical experts to provide direction on the operation of the Network and guidance on the potential projects and working groups under its umbrella. Please find a list of proposed working groups as below.

Working Group (WG)	Title
WG 1	Good Practice and Lessons Learned from LTO of Nuclear Power Plants
WG 2	Ageing Management During Design, Construction and Commissioning of Nuclear Power Plants
WG 3	Risk-informed Approach in Ageing Management Program and LTO Decision
WG 4	Environmental impacts to Life Management of Nuclear Power Plants
WG 5	Equipment Survivability for Beyond Design Basis Accident in Nuclear Power Plants
WG 6	Implementation of Equipment Reliability Program in Nuclear Power Plants

After the TM, the IAEA informally requested nominations for SC members from MS. The nominees should be senior experts from the MS in relevant areas. They ought to have extensive connections with national technical communities. Nominating more than one expert to the SC is possible. But in this case, a lead should be designated. Nominations from 19 MS and international organizations have been received so far. More are expected.

Since the launch of the LMNPP Network, many activities are being carried out under its umbrella. For example, a cooperative event between IAEA and MS was held and an expert Mission to directly support MS in relevant areas was organized. In addition, operating experience from LTO started being shared in the members' area on the LMNPP Network. Furthermore, some WGs have made great progress, with WG 1 focusing on the Good Practice and Lessons Learned from LTO of Nuclear Power Plants.

It is important to collect operating experience from LTO. Such experience would be valuable information for a broad range of MS; including those that recently started considering LTO to those now applying to licence a reactor out to as long as 80 years. It's very useful to share the challenges and issues in material degradation, licensing process, equipment reliability and technical support, and to identify the research needs.

To address the issue, an IAEA Nuclear Energy Series document on Good Practices and Lessons Learned from Long Term Operation of Nuclear Power Plants was proposed in 2022. The topic is in line with the WG1. So far, two Consultancy Meetings (CMs) were held, 13 country reports were collected, and the preliminary draft of the IAEA NE Series document is ready for review and awaiting wider feedback from MS.

Objectives

The purpose of the event is to provide an international forum for sharing good practices and lessons learned from Long Term Operation of Nuclear Power Plants. The event also provides an opportunity to review a draft publication provisionally entitled Good Practices and Lessons Learned from the Long Term Operation of Nuclear Power Plants. The meeting has the following primary objectives:

- To welcome presentations and discussions on Good Practices and Lessons Learned from the Long Term Operation of Nuclear Power Plants. The following list provides examples of presentation topics that would be appropriate for the event:
 - Innovative solutions to address technical issues for LTO of NPPs (AI, Machine Learning, etc.)
 - Preparation for LTO beyond 60 years, especially the R&D needs, licensing process, major refurbishment projects in NPPs to be planned for LTO, etc.;
 - Ongoing or Planned R&D activities for LTO;
 - Risk-informed Approach in Ageing Management Program and LTO Decision;
 - Implementation of Equipment Reliability Program in Nuclear Power Plants for LTO;
 - Environmental impacts to Life Management of Nuclear Power Plants;
 - Equipment Survivability for Beyond Design Basis Accident in Nuclear Power Plants;
- To review the draft of publication and discuss the resolution;
- To collect and discuss the results of the survey on Questionnaires for Survey on Research activities and needs for Long Term Operation (LTO) of NPPs;

At parallel, the First SC meeting of LMNPP Network will be held with the following objectives:

- To announce the establishment of the SC of LMNPP Network;
- To nominate the Chair of the SC;
- To review and approve the Terms of Reference of the LMNPP Network, including the overarching strategies of the LMNPP Network;
- To discuss the proposed WGs' progress, define or validate the scope, to recommend their external moderators;
- To discuss optimization of the LMNPP Network, including the website for improvement;
- To provide proposals and recommendations on the Agency's activities and forward programmes in the areas.

Working Language

The working language of the event will be English; no interpretation will be provided.

Working Material

The draft of the IAEA NE Series Publication and other meeting materials will be provided to the participants prior to the meeting. These materials will serve as the basis for dialogues at the meeting.

Participants will be also requested to view the public website of the LMNPP Network [Pages - LMNPP \(iaea.org\)](#) and apply for the membership for the Network [Pages - LMNPP Registration \(iaea.org\)](#), if appropriate. The content of the public website and member's area will also be part of the discussion during the meeting.

Topics

Besides from reviewing the draft publication and establishing the first steering committee of LMNPP Network, presentations are also invited from Member States and International Organizations. Please refer to “Objectives” for examples of topics.

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 view of the subject of the meeting, participation is limited to IAEA Member States that currently operate NPPs or are in the construction of their nuclear power units. Participation is solicited from representatives of NPPs and regulatory bodies, utilities, technical support organizations, developers, vendors, research organizations and international organizations engaged in the field of PLiM/LTO. To ensure maximum effectiveness in the exchange of information, participants should be persons actively involved in the subject matter of the meeting.

In order to be designated by an IAEA Member State, participants are requested to send the **Participation Form (Form A)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA by **15 September 2023**. Participants who are members of an organization invited to attend are requested to send the **Participation Form (Form A)** through their organization to the IAEA by the above deadline.

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

The meeting is planned to be Hybrid. The meeting's agenda will be sent to each participant in advance of the event and the virtual meeting link and directions for entry will be sent.

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.

Presentations

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

Presentations should be prepared as Microsoft PowerPoint (.ppt) or Portable Document Format (.pdf) files. Computer-based projection facilities will be provided. Authors are requested to provide the Scientific Secretary with electronic copies of their presentation files in advance of their scheduled presentation slot so that the files can be duly uploaded. Electronic versions of the presentations are also necessary to ensure timely issuance of the proceedings to be prepared and distributed in electronic form.

It is not mandatory for all participants to submit a presentation. However, the IAEA welcomes and encourages contributions in this format. Time for the presentations will be limited to 25 minutes followed by a five-minute discussion period. The number of presentations may have to be limited so as to leave sufficient time for Review of the IAEA draft document on "Good Practices and Lessons Learned from the Long Term Operation of Nuclear Power Plants" and 1st Steering Committee Meeting of the LMNPP Network.

Expenditures and Grants

The costs of the meeting are borne by the host organization; no registration fee is charged to participants. Travel and subsistence expenses of participants will have to be borne in general by their designating Governments/organizations. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Such assistance may be offered upon specific request to normally one participant per country provided that, in the IAEA's view, the participant on whose behalf assistance is requested will make an important contribution to the meeting. The application for financial support should be made at the time of designating the participant.

The application for financial support should be made using the **Grant Application Form (Form C)**, which has to be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **15 September 2023**.

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

Venue

The event will be held at Hilton Gyeongju, 484-7 Bomun-ro, Gyeongju-si, Gyeongsangbuk-do, Republic of Korea. Participants must make their own travel and accommodation arrangements.

Visas

Participants who require a visa to enter the Republic of Korea should submit the necessary application as soon as possible to the nearest diplomatic or consular representative of the Republic of Korea. The host organization, KHNP will provide the designated participants with the invitation letter to support visa application.

Additional Information

The event will start on Tuesday, 21 November 2023, at 9.30 a.m. and end on Friday, 24 November 2023, at 3.00 p.m.

The event agenda, together with information on local arrangements, will be sent to the designated participants in due course.

The local representative of the host organization (KHNP) will be Mr Se Youl Won.

Contact details:

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Local Transportation and Accommodation

The host organization, KHNP, will be providing information of local transportation and list of nearby hotels of the venue. Participants are requested to book their rooms themselves.

Additionally, participants may select to make their own bookings at other hotels in the area of the meeting location.

IAEA Contacts

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