EXECUTIVE SUMMARY

At the invitation of OKG AB, the IAEA conducted an Expert Mission based on SALTO methodology (Safety Aspects of Long Term Operation) at the Oskarshamn Nuclear Power Plant (NPP) (further referred to as 'the plant') from 3 to 6 December 2019.

The plant is owned and operated by Uniper and Fortum where Uniper is the majority shareholder. Operation started in 1985. The unit will achieve its original design lifetime of 40 years of operation in 2025 and the owners intend to extend the unit's lifetime by 20 years.

This expert mission focused on the status of activities for the long term operation (LTO) assessment of the plant. The review team consisted of two IAEA staff members and two external experts, covering a limited part of the standard scope of a SALTO mission consistent with areas A, B and part of area C. The team reviewed the completed, in-progress and planned activities related to ageing management and LTO.

Through the review of available documents, presentations and discussions with counterparts and other members of the plant staff, the team concluded that the plant has made progress in the field of ageing management in recent years and has initiated many activities to prepare for safe LTO. The plant's LTO project addresses many of the topics recommended by the IAEA.

The team found the plant staff to be professional, open and very receptive to suggestions for improvement. The team concluded that the plant management is committed to improving ageing management and plant preparedness for LTO. In addition, the team noted good performances in the following areas:

- System for prioritizing of projects and major activities at the plant (review area A);
- In-service inspection programme for welds (review area B).

The team recognised that the plant approach to and preparatory work for safe LTO generally follows the IAEA Safety Standards and international good practices. The team identified several areas for further improvement. Nine issues were noted:

- The plant has not established a suitable policy or organizational arrangements to prepare the plant for safe LTO in a timely manner;
- The current PSR does not provide support in justification of safe LTO;
- Design basis documentation is not adequately managed to ensure its availability for the plant;
- The safety analysis report (SAR) has not been adequately updated for LTO;
- The methodology for scope setting is not appropriately defined and documented;
- The implemented maintenance programmes do not ensure effective management of potential ageing effects for LTO;
- The existing AMPs and plant programmes are not reviewed and implemented to ensure effective ageing management for LTO;
- The corrective action programme is not appropriately used in support of ageing management and LTO;
- The AMR is insufficient to demonstrate effective ageing management of in-scope structures and components for LTO.

A summary of the review was presented to the plant management during the exit meeting held on 6 December 2019. The plant management expressed a determination to address the areas identified for improvement and indicated their intention to invite a 'Pre-SALTO Mission to Oskarshamn Nuclear Power Plant Unit 3' in February 2021.