EXECUTIVE SUMMARY

At the invitation of Vattenfall in Sweden, the IAEA conducted a SALTO (Safety Aspects of Long Term Operation) mission at the Forsmark Nuclear Power Plant (NPP) Units 1 and 2 (further referred to as 'the plant') from 7 to 16 November 2023.

The SALTO mission reviewed the status of activities related to long term operation (LTO) assessment of the plant against IAEA Safety Standards and international best practices. The review team consisted of two IAEA staff members (team leader and deputy team leader), six international experts, and two observers, covering all six areas of the standard scope of a SALTO mission. The team reviewed the completed, in-progress and planned activities related to LTO, including ageing management of the structures, systems and components (SSCs) important to safety and revalidation of time limited ageing analyses (TLAAs). Through the review of available documents, presentations and discussions with counterparts and other members of the plant staff, the IAEA team observed, in the field of ageing management and safe LTO, that many ageing management and LTO activities are already in compliance with IAEA safety standards. The SALTO team encouraged the plant management to facilitate implementation of all remaining activities for safe LTO.

The team found the plant staff to be professional, open, and receptive to suggestions for improvement. The mission team observed that plant management is committed to improving plant activities for LTO. Walkdowns showed the plant to be in good condition. In addition, the team noted several good performances including the following:

- The plant developed and implemented a detailed process for the identification of components not important to safety that may influence intended functions of safety components.
- The plant developed and implemented a comprehensive obsolescence management programme.
- The plant developed a programme to coordinate specialist activities in order to develop specialized human resources in specific areas, such as ageing management.

The team recognized that the plant's intention is to follow the IAEA Safety Standards in preparation for safe LTO. The team identified several areas for further improvement. Fourteen issues were raised, including the following:

- Some attributes of effective ageing management are not addressed.
- Commodity groups are not adequately defined.
- Ageing Management Programmes (AMPs) for civil SSCs do not address all attributes of an effective AMP.

A summary of the review was presented to the plant management during the exit meeting held on 16 November 2023. The plant management expressed a determination to address the areas identified for improvement and indicated their intention to continue cooperating with the IAEA on the review of progress in preparing the plant for safe LTO and to invite a SALTO Follow-up Mission in the future.