

EXECUTIVE SUMMARY

At the invitation of the Government of Argentina, the IAEA conducted a SALTO (Safety Aspects of Long Term Operation) mission at Unit 1 of the Atucha Nuclear Power Plant (NPP) from 27 February to 7 March 2024.

Atucha NPP (further referred to as ‘the plant’) Unit 1 has been in operation since 1974. The plant reached the end of its design lifetime of 32 effective full power years in March 2018. The current operating license expires in 2024. The plant management intends to extend the operation for another 24.25 effective full power years, which is approximately 26 calendar years.

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 four observers from Belgium, Brazil, Japan, Slovenia, Spain, Sweden and the USA. The review covered 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 preparedness for safe LTO that many of the ageing management and LTO activities are already in alignment with IAEA Safety Standards and other topics are planned to be addressed in upcoming years, while many activities are still in progress.

The team found the plant staff to be professional, open and receptive to proposals for improvement. The mission team observed that plant management is committed to improving plant preparedness for LTO. In addition, the team noted a good practice and several good performances. The following are the most important:

- Qualification of coatings inside the containment
- Comprehensive condition assessment reports for SSCs.
- Objective score cards used for evaluation of applications for internal vacancies.

The team recognized that the plant’s intention is to consider the IAEA Safety Standards in preparation for safe LTO. The team identified fifteen areas for further improvement, the most significant ones are:

- Systematic safety assessment does not exist to identify reasonable safety improvements for the operation period beyond 2024.
- The plant has not fully established and implemented an equipment qualification programme for LTO.
- The implementation of the civil ageing management is ineffective.

A summary of the review was presented to the plant management and the regulatory body representative during the exit meeting held on 7 March 2024. The plant management expressed a determination to address the areas identified for improvement and confirmed the intention to invite a SALTO Follow-up Mission to Atucha Nuclear Power Plant Unit 1 to be conducted in 2026.