

# IAEA Says Finland's Loviisa Nuclear Power Plant Committed to Safety, Sees Areas for Enhancement

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([https://www.iaea.org/sites/default/files/styles/hd\\_1920x1080/public/loviisa-team220318-1140x640.jpg?itok=qY7S\\_6hp](https://www.iaea.org/sites/default/files/styles/hd_1920x1080/public/loviisa-team220318-1140x640.jpg?itok=qY7S_6hp))

Members of the OSART team and representatives of the Finnish counterpart after the OSART mission to Loviisa Nuclear Power Plant ended on 22 March 2018. (Photo: Aija Widemark, Fortum)

An International Atomic Energy Agency (IAEA) team of experts said the operator of Finland's Loviisa Nuclear Power Plant (NPP) demonstrated a commitment to safety. The team also identified areas for further enhancement.

The Operational Safety Review Team (OSART) concluded an 18-day mission on 22 March to Loviisa NPP, whose two 531-MWe pressurized-water reactors started commercial operation in 1977 and 1980, respectively. Fortum Power and Heat OY operate the plant, located about 100 km east of Helsinki, the capital.

Nuclear power generates one-third of electricity in Finland, which has four operating power reactors and is constructing a fifth reactor. OSART missions aim to improve operational safety by objectively assessing safety performance using the IAEA's safety standards and proposing improvement where appropriate.

"The team observed that the plant has made proactive safety improvements in recent years, such as major automation modifications and updates for safety systems," said team leader Fuming Jiang, a Senior Nuclear Safety Officer at the IAEA. "Staff at the plant are open and transparent, and very receptive to proposals to further improve operational safety in the plant."

The 16-member team comprised experts from Brazil, Canada, China, France, Germany, Hungary, Romania, Russia Federation, Slovak Republic, South Africa, Spain, Ukraine, United Kingdom, United States of America as well as IAEA officials.

The review covered the areas of leadership and management for safety; training and qualification; operations; maintenance; technical support; operating experience; radiation protection; chemistry; emergency preparedness and response; accident management; human, technology and organizational interactions; and long-term operation.

The team identified a number of good practices that will be shared with the nuclear industry globally, including:

- The plant has developed the capability to automatically calculate leak rate tests of containment.
- The plant established a process to test and improve modifications and updates early.
- The plant has adopted a key system to effectively control access to various rooms in the plant.

The mission made several proposals to improve operational safety, including:

- The plant management should improve communications of their expectations and consistently reinforce their implementation in the field.
- The plant should improve maintenance activities and procedures to ensure safe and reliable performance of systems and equipment.
- The plant should improve the use of human performance tools to minimize human error.

“We consider international peer reviews to be an important element in improving nuclear safety. Exchanging best practices and learning from other plants is highly valuable for all of us in the nuclear industry,” said Satu Katajala, the Loviisa plant manager. “The results and development areas of this OSART review will be included in the continuous improvement of the Loviisa power plant operations.”

The team provided a draft report of the mission to the plant’s management. The plant management and the Finnish Radiation and Nuclear Safety Authority (STUK), which is responsible for nuclear safety oversight in Finland, will have the opportunity to make factual comments on the draft. These will be reviewed by the IAEA and the final report will be submitted to the Government of Finland within three months.

The plant management said it would address the areas identified for enhancement and requested a follow-up OSART mission in about 18 months.

## Background

General information about OSART missions can be found on the IAEA Website (</services/review-missions/operational-safety-review-team-osart>). An OSART mission is designed as a review of programmes and activities essential to operational safety. It is not a regulatory inspection, nor is it a design review or a substitute for an exhaustive assessment of the plant's overall safety status.

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## Related Resources

-  [Operational Safety Review Team \(OSART\) \(https://www.iaea.org/services/review-missions/operational-safety-review-team-osart\)](https://www.iaea.org/services/review-missions/operational-safety-review-team-osart)
-  [Nuclear safety and security \(https://www.iaea.org/topics/nuclear-safety-and-security\)](https://www.iaea.org/topics/nuclear-safety-and-security)

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