

- Continuous technical reviews have been/will be conducted by the IAEA, before, during, and after the discharge of ALPS treated water into the sea to assess its conformity with the IAEA's safety standards.
- The first IAEA review was conducted in February 2022, and a report summarizing its findings was published in April of the same year. Tokyo Electric Power Company Holdings revised the implementation plan and radiological impact assessment report and enhanced their content.

IAEA Review

- Review the radiological characterization of ALPS treated water and the discharge plan, intensively focused on the aspect of safety
- Review the process of the Nuclear Regulation Authority, the body responsible for safety regulation
- Corroborate the data published by Japan by conducting monitoring of ALPS treated water and radioactive materials in the environment as an independent organization

Major items subject to the review in February 2022

- Assessment of the radiological characterization of materials contained in ALPS treated water to be discharged
- Safety of the ALPS treated water discharge process (devices, etc. to be used for discharge)
- Radiological Environment Impact Assessment



Revise of the implementation plan and radiological environmental impact assessment, etc., and further enhancement of its content

(Source) Prepared based on the "Safe and secured disposal of treated water for reconstruction and decommissioning (iv) IAEA's review of the safety of ALPS treated water (<https://www.enecho.meti.go.jp/about/special/johoteikiyo/shorisu/04.html>) by the Agency for Natural Resources and Energy



Regarding the discharge of ALPS treated water, Government of Japan has requested assistance from the International Atomic Energy Agency (IAEA) to review its plan and activities for the discharge of ALPS treated water to ensure that the discharge can be conducted in a safe and transparent manner in conformity with the IAEA Safety Standards. The IAEA has accepted Japan's request and conducted a technical review to ensure that the discharge of ALPS treated water over the coming decades is conducted in conformity with the IAEA Safety Standards. The technical review consists of multiple missions, and a progress report is to be published after each review mission. Before the discharge of ALPS treated water, a comprehensive report including conclusions of the review will be published.

The IAEA conducted the first review from February 14 to 18, 2022, and published a report summarizing the findings through the review on April 29. In relation to the safety of related facilities which is the main content of the implementation plan, it was recognized that an enormous amount of analysis was performed by TEPCO for the conduct of the safety assessment, the level of detail, its comprehensive approach, as well as the fact that a large number of potential single failure events were taken into consideration for the development of the design criteria for the discharge of ALPS treated water. Regarding the radiological impact assessment, it was acknowledged that a comprehensive and detailed analysis was conducted and it was also noted that the radiological impact on the public was expected to be very low and significantly below the level set by the Japanese regulatory body. The IAEA Task Force noted that a significant amount of work and analysis has been performed to discharge the ALPS treated water, but the results need to be clearly described in writing to demonstrate compliance with relevant requirements in the context of IAEA safety standards so that the details of the radiological impact assessment can be fully understood.

Considering the points raised by the Task Force in the IAEA review, TEPCO revised the implementation plan and the report of assessment of radiological impact on the public and the environment and further enhanced its content.

(Source) Prepared based on the following:

- "IAEA Review of Safety Related Aspects of Handling ALPS-Treated Water at TEPCO's Fukushima Daiichi Nuclear Power Station: Report 1: Review Mission to TEPCO and METI" (February 2022) by the IAEA https://www.iaea.org/sites/default/files/report_1_review_mission_to_tepco_and_meti.pdf
- The news release titled "The IAEA Published a Report on Its February Review Mission of Safety Aspects of Handling of ALPS Treated Water at Fukushima Daiichi Nuclear Power Station" (April 2022) by the Ministry of Economy, Trade and Industry https://www.meti.go.jp/english/press/2022/0429_001.html

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