Overview of the IAEA Report on Its Review of Safety Related Aspects of Handling ALPS Treated Water at Fukushima Daiichi Nuclear Power Station (Second Review Mission after the Start of the Discharge)
Tokyo Electric Power Company Holdings, Inc. Fukushima Daiichi Decontamination and Decommissioning Engineering Company

- ✓ In order to make steady progress with the decommissioning of the Fukushima Daiichi Nuclear Power Station (FDNPS) ,TEPCO began the discharge of ALPS treated water from the FDNPS on August 24 in 2023.
- Before the discharge of the ALPS treated water, the series of reviews had been conducted by the International Atomic Energy Agency (IAEA). On July 4 in 2023, IAEA published "Comprehensive Report on the Safety Review of the ALPS-Treated Water at the Fukushima Daiichi Nuclear Power Station" as conclusion of those reviews.
- In the comprehensive report, the IAEA stated, "The IAEA is committed to engaging with Japan on the discharge of ALPS treated water not only before, but also during and after the treated water discharges occur." and "Additional review and monitoring activities are envisaged that will continue and which will provide additional transparency and reassurance to the international community by continuously providing for the application of the relevant international safety standards"
- In April 2024, the IAEA Task Force visited Japan to conduct its second review mission*1 on Handling of ALPS treated water at FDNPS after the start of the discharge. Later on July 18 in 2024, the IAEA published a report "Review of Safety Related Aspects of Handling ALPS treated water*2." This leaflet provides an overview of the review mission and the report.
 - *1 First review after the start of the discharge was conducted by the IAEA Task Force in October 2023, with the report published in January 2024.
 - *2 The report is available on the IAEA website. The report can be accessed **by scanning** the 2D barcode on the right.

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the Link to the report

Overview of the Review Mission

Schedule: From April 23 to 26 in 2024

- The IAEA's review has been conducted by the IAEA Task Force, which consists of the IAEA officials and international experts^{†1}, including Director and ALPS Coordinator Gustavo CARUSO.
- The same major technical items^{†2} were reviewed as in the reviews before the start of discharge and the first review mission^{†3} after that.



The member of the IAEA Task Force visited Japan (April 23 in 2024, METI)



Director and ALPS Coordinator Gustavo Caruso At Opening Session (April 23 in 2024, MOFA)



The IAEA Task Force at the dilution facility (April 25 in 2024, FDNPS)

- †1 Six members of the IAEA officials and nine members of international experts have visited Japan. (from Argentina, Australia, China, France, Republic of Korea, Russia, United Kingdom, United States and Vietnam).
- †2 The major technical items are as follows
 - i . Regulatory Control and Authorization, ii . Safety Related Aspects of Systems and Processes for Controlling Discharges, iii . Characterization of the Source , iv . Radiological Environmental Impact Assessment, v . Source and Environmental Monitoring Programs, vi . Involvement of Interested Parties, vii. Occupational Radiation Protection
- †3 The details of the IAEA reviews before the start of the ALPS treated water discharge are here [Safety review by the IAEA, Treated Water Portal Site (TEPCO)]
 - https://www.tepco.co.jp/en/decommission/progress/watertreatment/safetycheck/index-e.html



Safety review by the IAEA Treated Water Portal Site

Key Points of the Report

- The Task Force did not identify anything that is inconsistent with the requirements in the relevant international safety standards. Therefore, the IAEA can reaffirm the fundamental conclusions of its safety review as outlined in the 4 July 2023

 Comprehensive Report.
- The Task Force confirmed that the equipment and facilities are installed and operated in a manner that is consistent with the Implementation Plan and the relevant international safety standards.

Conclusions of the Comprehensive Report, (Published July in 2023)

- The approach to discharge ALPS treated water into the sea, and associated activities by TEPCO, NRA and the Government of Japan, are consistent with relevant international safety standards.
- ➤ The discharge of the ALPS treated water, as currently planned by the TEPCO, will have a negligible radiological impact on people and the environment.





The comprehensive Report (Left), and the Links to the paper (right)

Future activities of the IAEA

According to the IAEA review report,

The Task Force will continue to review the activities of TEPCO and NRA to assess whether they are consistent with the relevant international safety standards.

The next review mission is anticipated to take place in the last quarter 2024.



The Comment from Director General Grossi of the IAEA on publishing the comprehensive report (July in 2023)

The IAEA will continue its impartial, independent and objective safety review during the discharge phase.

Director General Rafael Grossi of the IAEA

TEPCO will continue to receive reviews by the IAEA in light of international safety standards and take all possible measures to ensure safety while providing information on reviews based on scientific evidence to both in Japan and international community in a highly transparent manner.

IAEA (International Atomic Energy Agency)

- The IAEA is an organization under the United Nations working for the safe and peaceful use of nuclear energy.
- Since its establishment in 1957, the IAEA has worked with 173 member states and related organizations to promote the peaceful use of nuclear energy and to prevent the military use of it.
- To protect human health and the environment from radiation, the IAEA has the authority to establish and adopt "Safety Standards".
- The IAEA Environment Laboratories which are staffed by experts in various fields, have been established to provide comprehensive knowledge on the environmental effects of radioactive materials and their protection.
- The IAEA also reviews the entire decommissioning program of the Observation of the ALPS by the IAEA Fukushima Daiichi Nuclear Power Station.





Director General Rafael Grossi (May 2022)

[The IAEA official page related to the ALPS treated water]

(A) IAEA



Example of the web topics

- · Overview of the review mission
- Publication of the report of the review
- Explanation of construction of the ALPS facility
- Monitoring methods of ALPS treated water by the IAEA etc.



← The IAEA official page

The IAEA official page in Japanese •



T=PCO





Tokyo Electric Power Company Holdings, Inc. Fukushima Daiichi Decontamination and Decommissioning Engineering Company **Treated Water Portal Site**

https://www.tepco.co.jp/en/decommission/progress/watertreatment/index-e.html