Fukushima Daiichi Nuclear Power Station Analysis Results of ALPS Treated Water Sampled from the Measurement/Confirmation Facility Tank Group A and the Scheduled Date of the Commencement of the First Discharge in FY2025

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Tokyo Electric Power Company Holdings, Inc.
Fukushima Daiichi Decontamination &
Decommissioning Engineering Company

● Transfer of ALPS treated water from G4 south area Group B and K3 area Group A/B to measurement/confirmation facility tank group A was completed on February 10, 2025, in preparation for the first discharge of FY2025. Circulation/agitation commenced on February 13, 2025 and sample were taken on February 21, 2025.

< Announced by March 27, 2025 >

- The analysis results from sampled specimens have confirmed that the water in tank group C meets discharge criteria.
 - ① Nuclides to be measured and assessed (30 nuclides):

 The sum of the ratios of the concentration of each radionuclide to the regulatory concentration: 0.083 (confirmed to be less than 1)
 - ② Tritium: 370,000 Bq/liter (confirmed to be less than 1 million Bq/liter)
 - 3 Nuclides voluntarily checked to ensure that they are not significantly present (38 nuclides): No significant concentrations found of any of the nuclides
 - ④ General water quality (voluntary check to confirm that there are no unusual water quality) (44 criteria): Criteria values have been met
- Measurements taken by the external agency* (Kaken) show the same results and confirm that the water in tank group A meets discharge criteria. Therefore, we plan to commence of the discharge of ALPS treated water into the sea from April 10, 2025. (planned total amount of water to be discharged: approx. 7,800m³, planned tritium discharge volume: approx. 2.9 trillion Bq)
- Tritium concentration after dilution is approximately 500 Bq/liter, which is well below the regulatory concentration limit (60,000 Bq/liter), WHO standard for drinking water quality guidelines (10,000 Bq/liter), and value stipulated in the government policy (1,500 Bq/liter).
- We are discharging ALPS treated water starting from the one with lower tritium concentration. It is expected that the concentration of tritium in seawater will be affected depending on the concentration of tritium in the treated water to be released in the future, and higher values than before will be detected. Even in such cases, it is evaluated that the concentration will remain below the discharge suspension level (700 Bq/liter) and the investigation level (350 Bq/liter).
- Going forward, we will remain vigilant to ensure the safe and stable discharge of ALPS treated water.

^{*} Measurements taken of ① Nuclides to be measured and assessed (30 nuclides); ② Tritium; and, ③ Nuclides voluntarily checked to ensure that they are not significantly present (38 nuclides).

[Reference] FY2025 ALPS treated water discharge plan (1/2)



As of March 2025, the FY2025 discharge plan is as follows. There will be seven discharges during the year with each discharge releasing approximately 7,800m³ for an annual discharge of approximately 54,600m³. The annual tritium discharge volume will be approximately 15 trillion Bq.

Management number ^{※1}	Transfer source tank [§]	% 2	Amount of water >> to be transferred	% 3	Discharge commencement period
25-1-12		B(Transferred to Measurement/Confirmation facility Group A) (Transferred to Measurement/Confirmation facility Group A)	**4: Approx. 8,080m³: Approx. 910m³	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.45~0.55 ⁸⁶ Tritium concentration: 220,000~370,000Bq/liter ⁸⁷ Total tritium volume: 2.8 trillion Bq	April
25-2-13	K3 area Groups A/B ** J1 area Group E	(Transferred to Measurement/Confirmation facility Group C) (Transferred to Measurement/Confirmation facility Group C)	• •	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.45~0.62 ³⁶⁶ Tritium concentration: 220,000~380,000Bq/liter ³⁶⁷ Total tritium volume: 1.9 trillion Bq	June~July
25-3-14	J1 area Group E G5 area Group E	(Transferred to Measurement/Confirmation facility Group A) (Transferred to Measurement/Confirmation facility Group A)		Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.47~0.62 ³⁶⁶ Tritium concentration: 200,000~380,000Bq/liter ³⁶⁷ Total tritium volume: 2.9 trillion Bq	July~August
25-4-15	G5 area Groups E/C/B	(Transferred to Measurement/Confirmation facility Group B)	*4: Approx. 9,000m ³	Secondary treatment: None Sum of the ratios to regulatory concentrations: $0.47^{\circ}0.62^{*6}$ Tritium concentration: $200,000^{\circ}220,000$ Bq/liter *7 Total tritium volume: 1.6 trillion Bq	September

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- **1 The management number is made up of the fiscal year, followed by the discharge number for that fiscal year, and the total number of discharges to date. For example, "25-1-12" indicates that the data is for the first discharge of FY2025, which is the twelfth discharge to date.
- *2 The tank order from which water will be transferred will not be impacted by increases/decreases in the transfer volume (factual measurements). But order of discharge may be moved forward or backward.
- X3 Underlined parts indicate actual values.
- *4 Since there will be no water remaining in the receiving tanks (Measurement/Confirmation tank groups A/B) after the tank inspections, the amount of water to be transferred will total approximately 9,000m³ (discharge volume is approximately 7,800m³).
- *5 K3 area Group A/B tanks emptied as a result of transfer/discharge during FY2023 and FY2024 will be reused to receive ALPS treated water.
- **6 Conservative values calculated from the analytical values of the seven major nuclides (Cs-134, Cs-137, Sr-90, I-129, Co-60, Sb-125, Ru-106) measured after ALPS treatment and storage in tanks, plus the maximum value of C-14 (0.11) and an estimate of the total of other nuclides at 0.3. **7 Tank group average, estimated taking into consideration decay as of April 1, 2025.

[Reference] FY2025 ALPS treated water discharge plan

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Inspection suspension (including full inspections of measurement/confirmation facility Group C tanks)

25-7-18

G4 north area Group A/B(Transferred to measurement/confirmation facility Group B)

H2 area Group J (Transferred to measurement/confirmation facility Group B)

Secondary treatment: None

Sum of the ratios to regulatory concentrations: 0.58~0.78³

Tritium concentration: 260,000~270,000Bq/liter *4

Total tritium volume: 2.0 trillion Bq

March



- *1The management number is made up of the fiscal year, followed by the discharge number for that fiscal year, and the total number of discharges to date. For example, "25-1-12" indicates that the data is for the first discharge of 2025, which is the twelfth discharge to date.
- X2 Whereas the order of the tanks from which water will be transferred will not change due to increases or decreases in the amount of water transferred (actual measurements), the discharge number may be moved up or back.

: Approx. 4,100 m³

- *3 Conservative values calculated from the analytical values of the seven major nuclides (Cs-134, Cs-137, Sr-90, I-129, Co-60, Sb-125, Ru-106) measured after ALPS treatment and storage in tanks, plus the maximum value of C-14 (0.11) and an estimate of the total of other nuclides at 0.3..
- *4 Tank group average, estimated taking into consideration decay as of April 1, 2025