

Fukushima Daiichi Nuclear Power Station Seventh Discharge in FY2025
Analysis Results of the First Stage of the Discharge of ALPS Treated Water into the Sea
(discharge in two-stage)

< Reference document >
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- Since the fourth discharge of FY2023, it has been decided to implement discharge in two-stage only once a year for the time being, and as such, the seventh discharge of FY2025 will be conducted in two stages.
- On March 4, 2026, we commenced the First stage of the seventh discharge of FY2025 of ALPS treated water into the sea (discharge in two-stage). A small amount (approximately 0.9m³) of ALPS treated water was diluted with seawater (approximately 1,200m³), which was temporarily held in the upper-stream storage and then sampled.
- After confirming the results of the first stage, we plan to commence the continuous discharge into the sea from measurement/confirmation tank group B (second stage) on or after March 6, 2026. (planned total amount of water to be discharged: approx. 7,800m³)

< Announced by March 4, 2026 >

- Today (On March 5, 2026), we confirmed that the tritium concentrations in the water created by diluting ALPS treated water with seawater in the upper-stream storage showed no significant differences between the calculated estimates and actual measurements, remained less than 700 Bq/liter[※], and that the ALPS treated water dilution/discharge facility verified that its performance had no problems. Based on these confirmations, we decided to proceed to the Second stage.
- The sample of the water was also analyzed by the Japan Atomic Energy Agency (JAEA) who confirmed that there is no significant differences between the calculated estimates and actual measurements, and that the concentration of tritium is less than 700 Bq/liter[※].
- Therefore, we plan to start up the seawater transfer pumps on March 6 at 10:30 a.m., which marked the commencement of the discharge into the sea from the measurement/confirmation facility tank group B. (Planned term of discharge : March 6 to March 24, 2026, planned total amount of water to be discharged : approximately 7,800 m³, planned tritium discharge volume : approximately 2.0 T Bq)
- Going forward, we will remain vigilant to ensure the safe and stable discharge of ALPS treated water.

※Value determined so that the upper operational limit of 1,500 Bq/liter is not exceeded in consideration of analysis uncertainty and instrument discrepancies

[Reference] Procedure of discharge in two-stage



- Procedure of discharge in two-stage is as follows:

First Stage • • • General performance confirmation of components (no discharge into the sea)

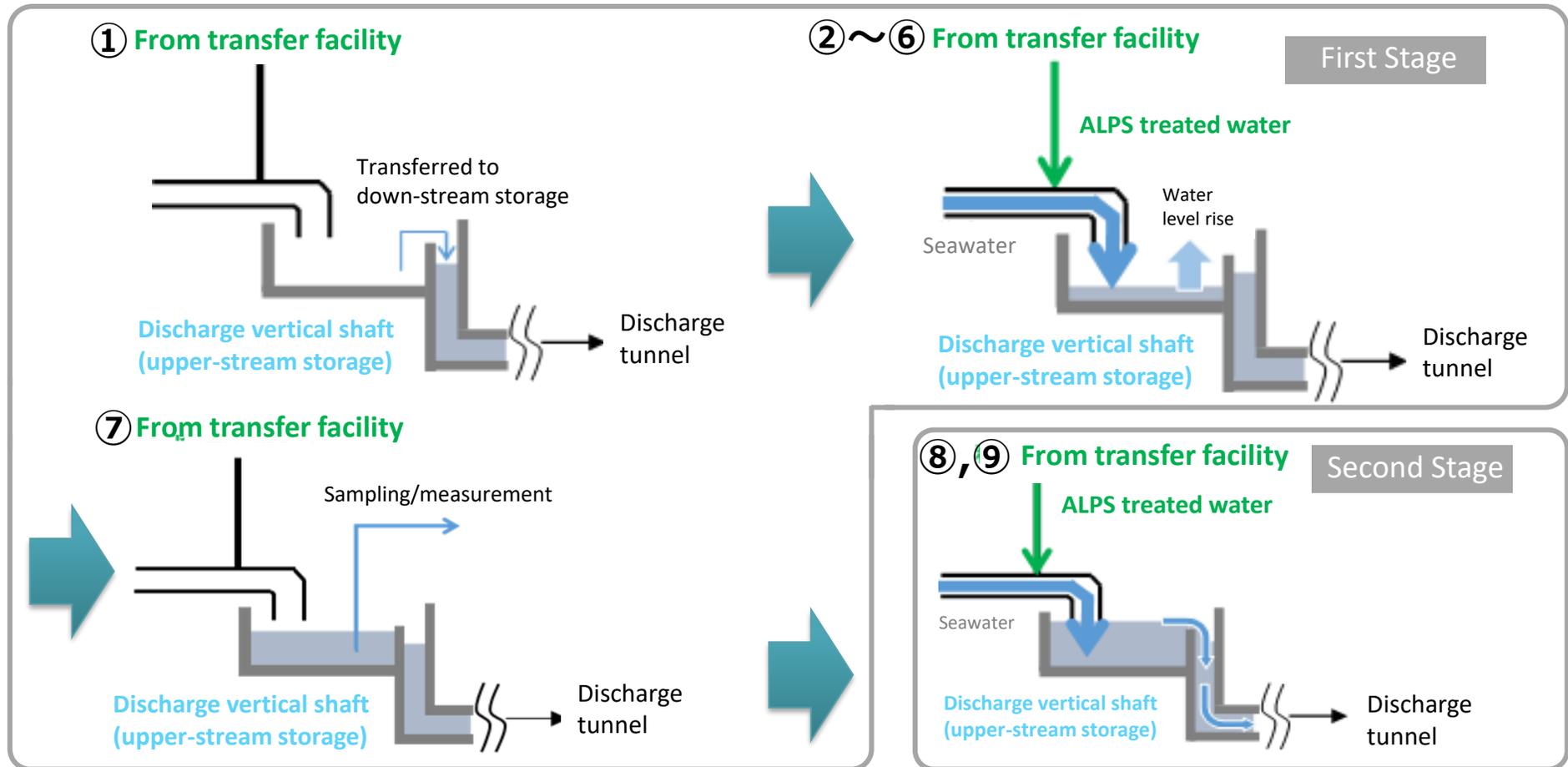
- ① Upper-stream storage emptied
- ② ALPS treated water (measurement/confirmation tank) tritium concentration entered into system
- ③ One seawater transfer pump started up
- ④ ALPS treated water transfer pump started up after the seawater transfer pump reaches rated flow
- ⑤ ALPS treated water transfer flow automatically adjusted in accordance with tritium concentration so that the ALPS treated water diluted by seawater concentration is 700 Bq/liter[※]
- ⑥ After rated flow has been reached, the ALPS treated water transfer pump and the seawater transfer pump will be shutdown
- ⑦ Operate the ALPS treated water dilution/discharge facility to verify that its performance had no problems.
The concentration of tritium in the water diluted by seawater in upper-stream storage shall also be measured to confirm that through calculated estimates and actual measurements that there had been no significant difference in the concentration of tritium and less than 700 Bq/liter.

※Value determined so that the upper operational limit of 1,500Bq/liter is not exceeded in consideration of analysis uncertainty and instrument discrepancies

Second Stage • • • Continuous discharge into the sea

- ⑧ Two seawater pumps started up in succession (commencement of discharge of diluted water from upper-stream storage)
- ⑨ After the two seawater pumps have reached rated flow the ALPS treated water transfer pump shall be started up (continuous discharge)
("the post-dilution tritium concentration" during continuous discharge shall be managed using calculated values and analysis values from water sampled daily from downstream of the seawater flow header)

[Reference] Method of discharge in two-stage



- ① The discharge vertical shaft (upper-stream storage) emptied
- ②~⑥ A small amount (approximately 0.9m³) of ALPS treated water will be diluted with seawater (approximately 1,200m³) and then held in the upper-stream storage).
- ⑦ Operate the ALPS treated water dilution/discharge facility to verify that its performance had no problems.
The concentration of tritium in the water diluted by seawater in upper-stream storage shall also be measured to confirm that through calculated estimates and actual measurements that there had been no significant difference in the concentration of tritium and less than 700Bq/liter. [Processes ① through ⑦ comprise the First Stage].
- ⑧, ⑨ Then, TEPCO will move on to the Second Stage which will be continuous discharge into the sea.