Measures pertaining to the fish inside the port of Fukushima Daiichi Nuclear Power Station (Completion of the construction to re-cover the seafloor of the Units 1-4 intake open channel)

< Reference document > June 13, 2024 Tokyo Electric Power Company Holdings, Inc. Fukushima Daiichi Decontamination & Decommissioning Engineerring Company

- To prevent fish containing high cesium concentrations from escaping outside of the port, TEPCO has been implementing the following multilayered measures pertaining to the fish inside the port.
- Improving environment of the port: covering the seabed soil inside the port and reducing the amount of cesium flowing into the port (by removing rubble, paving, etc.)
- Catching the fish in addition to keeping them in place : Along with installing multiple nets for preventing fish from leaving and gill nets, etc. inside the port to prevent fish from leaving that area, we have also been catching fish.
- ✓ Monitoring: We continue to measure the cesium concentrations in fish caught inside the port and monitor its trends.
- In addition to existing measures, the following measures will be implemented going forward:
- As a measure to improve the environment of the port, on January 18, 2023 a silt fence was additionally installed at the outlet for the drainage channel K at the Units 1-4 intake open channel to prevent the dispersion of cesium flowing into the Units 1-4 intake open channel with rain water. On October 16, 2023, we started re-covering the seafloor at the bottom of this open channel. On February 19, 2024, we have also started laying of cover soil for the second layer.
- ② On September 1, 2023 we completed fining the mesh size of the net (from 5cm to 2cm) to prevent the fish from leaving at the outlet of the Units 1-4 intake open channel.
- ③ On March 4, 2024, we completed constructions to replace the net to prevent fish from leaving at the east sea wall with steel pipe piles and a high durability net, and to extend this net so that it surrounds the vicinity of the Units 1-4 intake open channel.

< <u>Announced on September 27, 2022 (updated on June 5, 2023)*, and June 26, July 24, October 13, 2023, February 29* and March 4, 2024</u>> *: Only in Japanese

- Today (June 13), we completed the Units 1-4 intake open channel seafloor re-covering construction, thereby improving the environment inside the open channel.
- In addition, measures to prevent the fish from leaving in the vicinity of the Units 1-4 intake open channel had been completed by fining the mesh size of the net at the outlet of the open channel (completed in September 2023), and by replacing the net at the east sea wall that surrounds the vicinity of the open channel (completed in March 2024). The completion of the aforementioned construction and measures have further enhanced the measures pertaining the fish inside the port.
- We will continue to inspect the seabed soil inside the port, improve the water quality in the drainage channel K, among other efforts, so as to implement measures pertaining to the fish inside the port, which include improving the entire environment in the port.

1. The status of measures pertaining to the fish inside the port



- The status of measures pertaining to the fish inside the port is as follows:
- ① Construction to re-cover the seafloor of the Units 1-4 intake open channel was completed today (June 13, 2024).
 - Completion of the construction formed a covering layer thereby improving the environment inside the open channel.
- 2 We **completed** fining the mesh size of the net (from 5cm to 2m) to prevent the fish from leaving at the outlet of the Units 1-4 intake open channel on **September 1, 2023.**
 - Now that this work has been completed, fish larger than the mesh size of the net will not be able to enter or leave the open channel.
- ③ Replacement of the net to prevent the fish from leaving at the east sea wall was completed on March 4, 2024.
 - The completion of this construction has further enhanced the measures to prevent the fish from leaving at the vicinity of the Units 1-4 intake open channel.
- We will continue to inspect the seabed soil inside the port, improve the water quality in the drainage channel K, among other efforts, so as to implement measures pertaining to the fish inside the port, which include improving the entire environment in the port.



2. Status of construction to re-cover the seafloor of the Units 1-4 intake open channel (1/2)



- We formed a covering layer on top of the seabed soil of the Units 1-4 intake open channel and it helped to improve the environment inside the aforementioned open channel.
- Measures pertaining to the fish in the vicinity of the aforementioned open channel had been completed by fining the mesh sizes of the net to prevent the fish from leaving and replacement of the net to prevent fish from leaving at the east sea wall. In addition, <u>we have improved the environment of the aforementioned open channel and</u> <u>further strengthened measures pertaining to the fish inside the port with the completion of seafloor re-covering</u> <u>construction</u>.





Figure 2. Seafloor re-covering construction (second layer of cover) (Photographed on May 16) Figure3. Surveying by workers (divers) (Photographed on May 16)

2. Status of construction to re-cover the seafloor of the Units 1-4 intake open channel (2/2)

- Construction to re-cover the seafloor of the Units 1-4 intake open channel began on October 16, 2023.
- **The sand overlaying** (Approx. 30-50cm thick) for the first layer to prevent sediment from lifting up was completed on January 25, 2024.
- On February 19, 2024, we started soil overlaying (Approx. 20cm thick) for the second layer after equipment switching etc. associated with material changes was completed.
- Today (June 13, 2024), we completed all constructions. (Field work completed: June 3; Project deemed completed: June 13)
- During the aforementioned construction period there were <u>no significant fluctuations in cesium concentrations in seawater</u> inside the aforementioned intake open channel.



Figure 5. Laying soil for the second layer using the uni-float barge

%1 Covering with improved materials made of soil (bentonite) and cement

