

Fukushima Daiichi Nuclear Power Station Unit 2 Progress of Fuel Removal from Spent Fuel Pool

October 30, 2025



Tokyo Electric Power Company Holdings, Inc.

1. Fuel removal plan and progress

- Fuel handling equipment is currently being installed with the intent of commencing fuel removal during FY2026

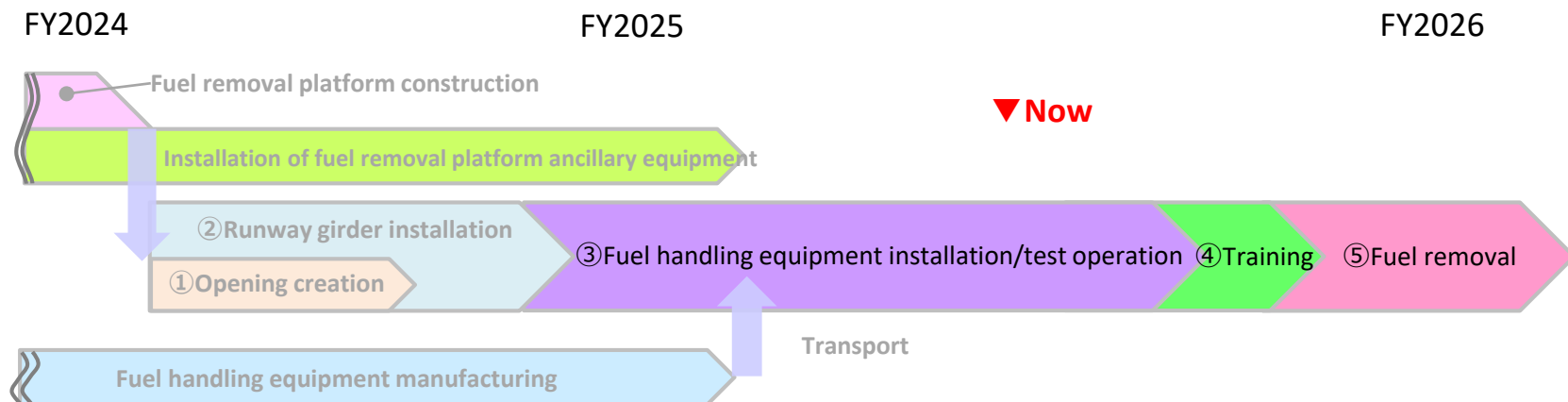
Fuel handling equipment

- Unit function tests are continuously being implemented.
- Load tests of the crane and jib crane are underway in preparation for completion inspections on October 30.
- Going forward, after installation of a contamination prevention house, the shutter between the anticum and the reactor building will be opened. The trolley will be placed on the runway girder after which we will transition to unit function testing inside the reactor building.

(The air flows on the reactor building side and the anticum side are 20,000m³/h and 10,000m³/h, respectively, so that the ventilation fan flow is balanced to prevent air in the reactor building from flowing into the anticum)

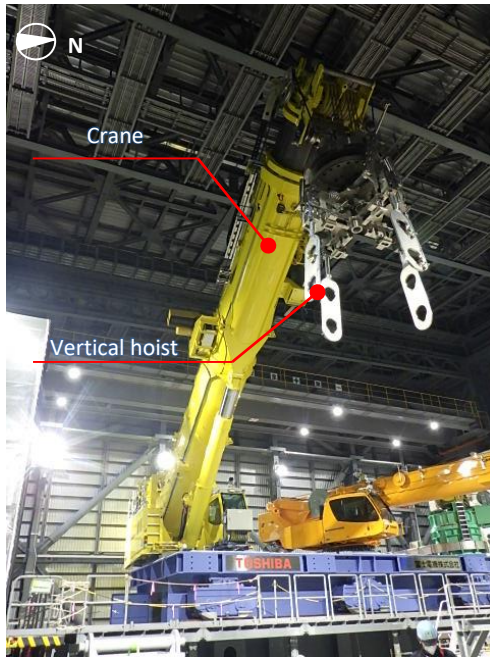
Cleaning the bottom of the cask pit and removing tarp fragments, etc. from the top of fuel

- After training on a mock up, cleaning of the bottom of the cask pit began on October 21.
- After the bottom has been cleaned, tarp fragments will be removed from the top of fuel.

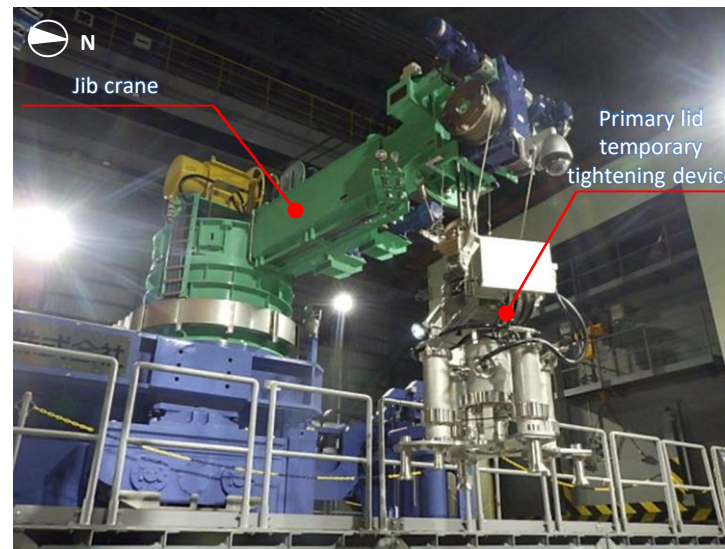


2. Fuel handling equipment testing progress and future plans

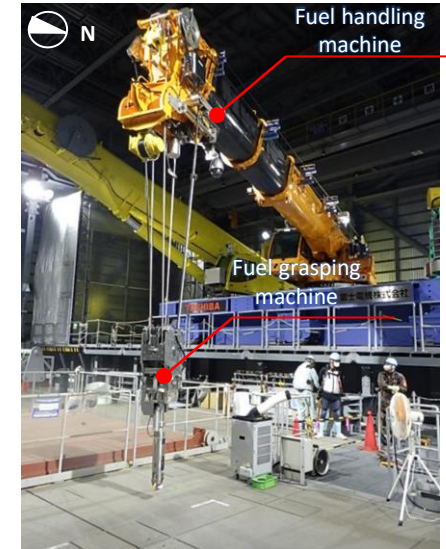
- Load tests are currently underway out of all the unit function tests performed on the crane, jib crane and fuel handling machine.
- The crane and jib crane will be subjected to completion inspections on October 30. From November, we will transition to unit tests performed inside the reactor building. (The fuel handling machine is not subject to a completion test because the hoist load is less than three tons)



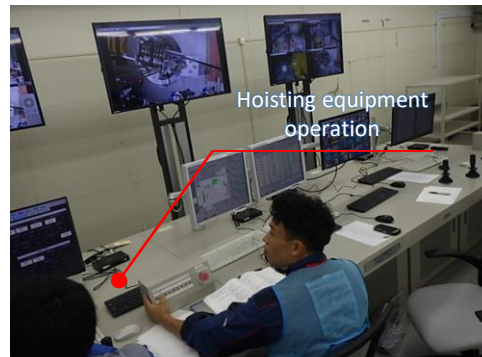
September 10, 2025 Crane



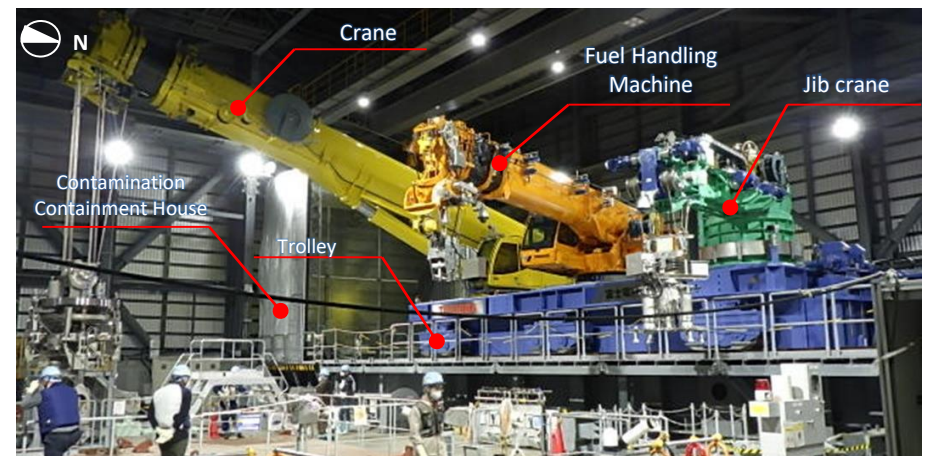
September 8, 2025 Jib crane



September 9, 2025 Fuel handling machine



September 9 and 10, 2025 Operations



September 8, 2025 Entire fuel handling equipment system

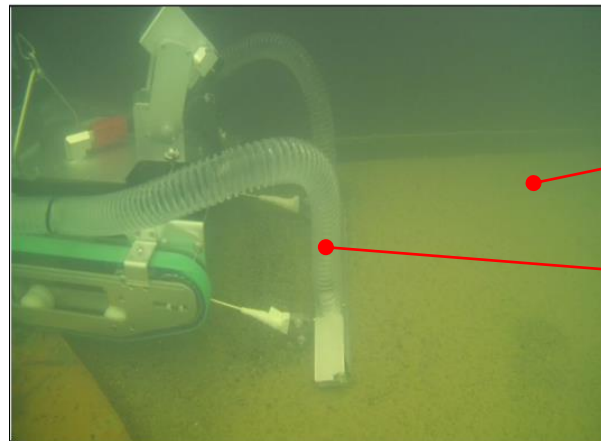
3. Status of cask pit bottom cleaning mock-up

- The bottom of the cask pit will be cleaned prior to placing a transport container (cask) in it inside the spent fuel pool and performing equipment function tests and test operation during fuel handling equipment tests.
- Since October 2025, a mock-up off-site and simulated sediment have been used to confirm that deposits can be removed.
- It was confirmed that the narrow area at the bottom of the cask pit could also be cleaned by replacing the suction nozzle.
- We also learned that the recovery filter can be easily clogged by sand-like deposits.



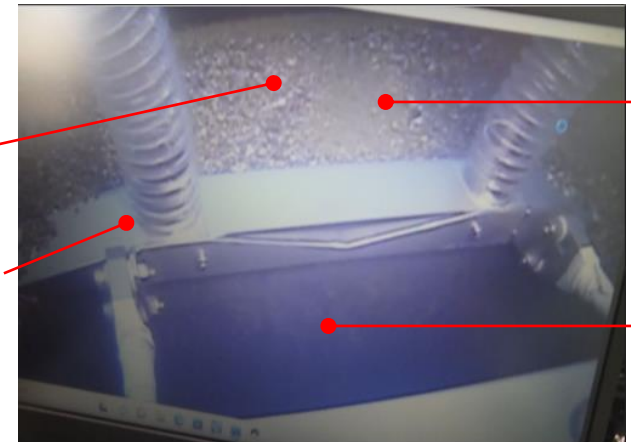
Submersible cleaning robot

<Device specifications>
Dimensions: Approx. 370×620×340 [mm]
Weight: Approx. 18kg



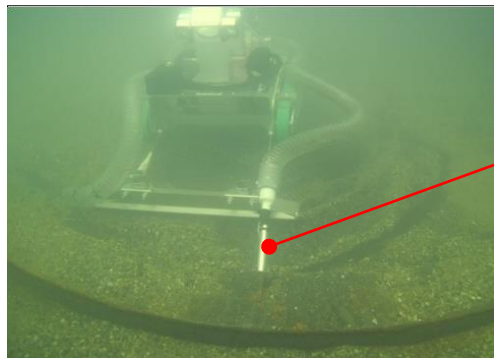
Deposits

Suction nozzle



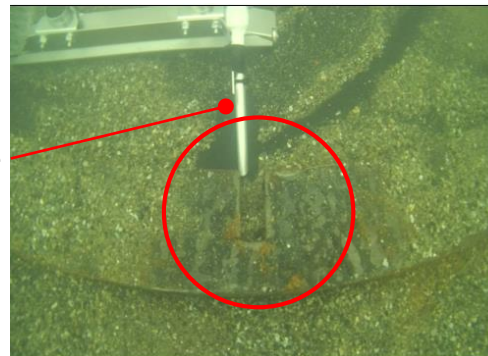
Prior to
cleaning

After
cleaning



Suction nozzle

Simulating narrow areas at the bottom of the cask pit



Prior to cleaning narrow areas



After cleaning narrow areas

4. Status of cask pit bottom cleaning

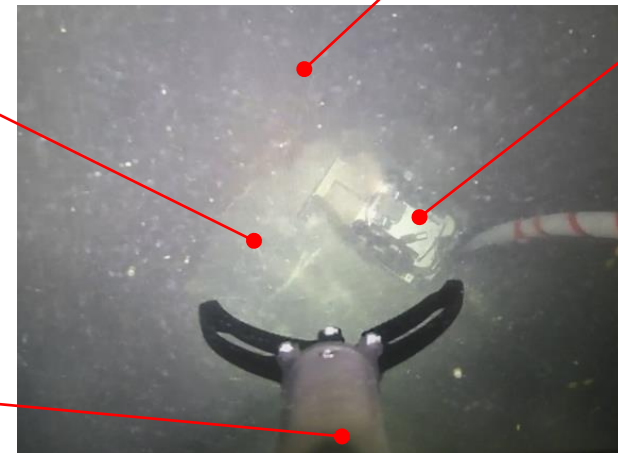
- Preparations have been underway since October 15, and cleaning of the bottom of the cask pit began on October 21.
- More sediment has accumulated since the investigation in 2020, but the particles are fine and there is almost no sandy sediment, therefore it is easier to suction up.
- Cleaning of the bottom should be completed by the beginning of November..



October 21, 2025 Deploying the submersible cleaning robot into the cask pit

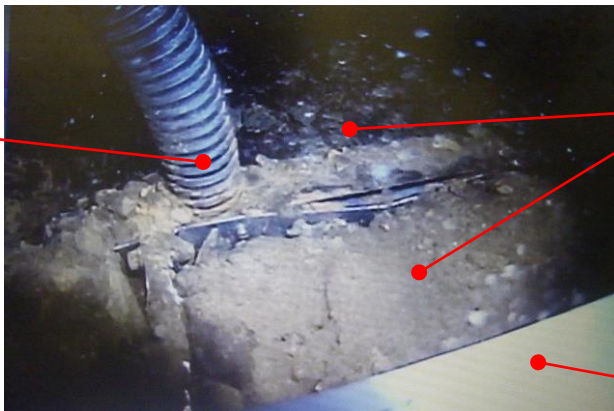
Cleaned area
(middle of the cask pit)

Arm of the
submersible ROV

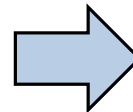


October 23, 2025 Cleaning the bottom of the cask pit

Submersible cleaning
robot hose

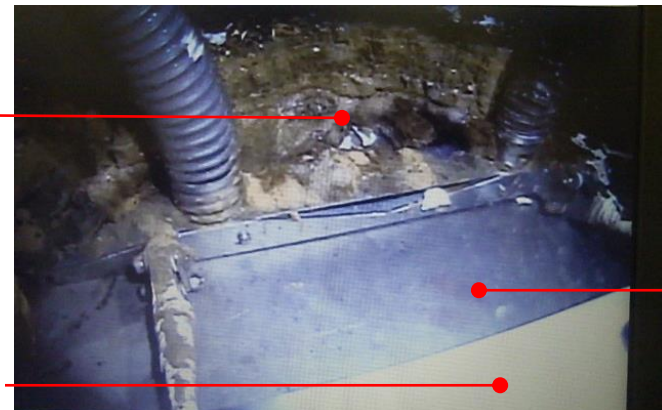


October 22, 2025 Prior to cleaning
the bottom of the cask pit



Deposits

Submersible
cleaning robot body



October 22, 2025 Under cleaning
the bottom of the cask pit

Bottom of
the cask pit

5. Status of mock-up for the removal of tarp fragments on the top of fuel

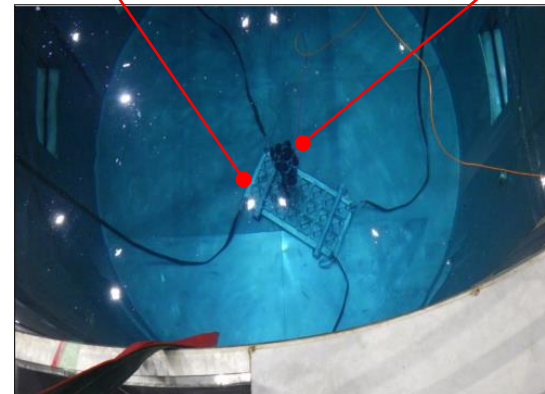
- A mock-up for practicing the removal of tarp fragments from the top of fuel has been built in the robot testing tank at the Japan Atomic Energy Agency (JAEA) Naraha Center for Remote Control Technology Development. We have confirmed that tarp fragments placed on the top of simulated fuel handles can be removed using the arm of the submersible ROV.
- Removed tarp fragments will be placed inside a basket while still in the pool and then dried after which they will be put into containers based on its dose level and stored in the solid waste storage vaults, etc. on site.
- Tarp fragments will be removed after we complete cleaning the bottom of the cask pit.



Submersible ROV

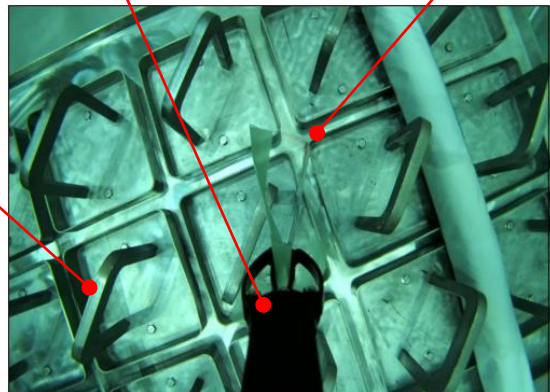
<Specifications>
Dimensions: Approx. 610×290×200 [mm]
Weight: Approx. 8kg

Simulated fuel handles Submersible ROV



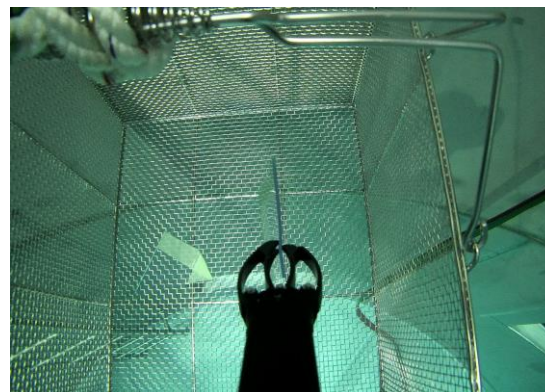
Submersible ROV heading towards the simulated fuel handles inside the tank

Submersible ROV arm Tarp fragment



Grabbing a tarp fragment

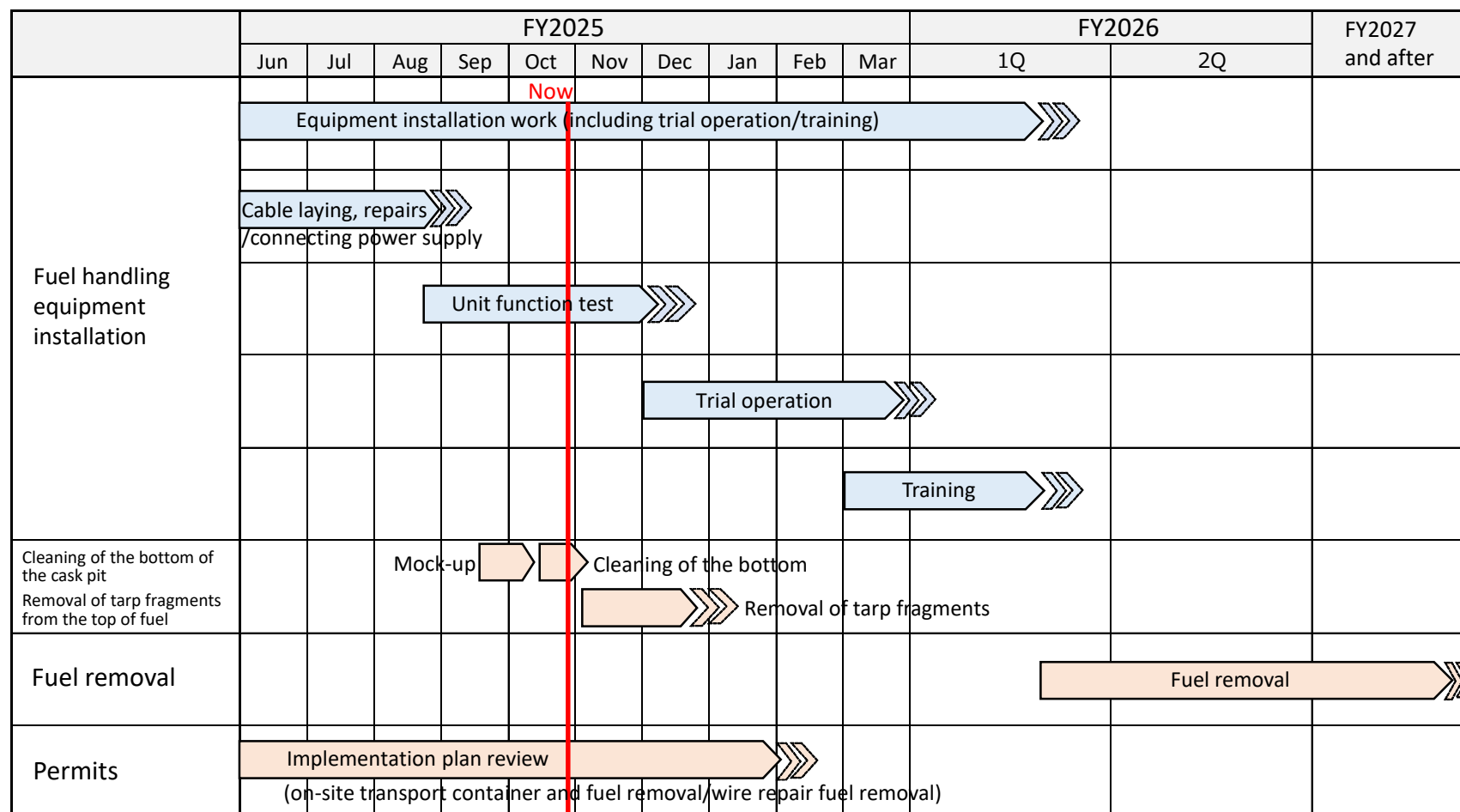
Simulated fuel handle:
The conditions inside
the spent fuel pool have
been replicated along
with multiple simulated
fuel handles



Putting removed tarp fragments into a basket

6. Schedule

- At current time, preparations are going smoothly with the aim of commencing fuel removal during FY2026.
- We will continue to move forward with this task while prioritizing safety.



* Changes may be made in accordance with schedule progress

* The line graph includes preparation/cleanup work periods