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

January 30, 2025

TEPCO

Tokyo Electric Power Company Holdings, Inc.

1． Plan and progress of fuel removal from spent pools

- Work is being carried out inside and outside the building to commence the fuel removal from spent pools between FY2024~FY2026.
- After the fuel removal work platform has been constructed, and opening will be made on the south side of the reactor building operating floor. Furthermore, after that fuel handling equipment will be installed.

【On-site】

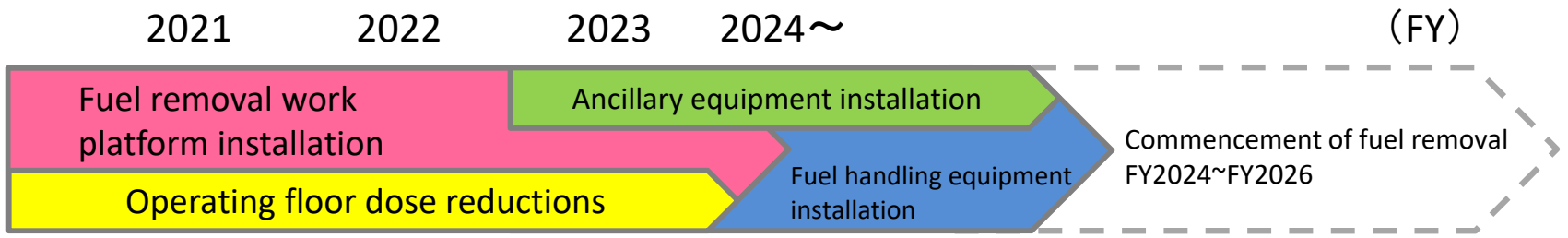
- Runway girder installation work began on October 24, 2024.
- Installation of the opening was completed on December 13, 2024.

【Off-site】

- Materials brought on-site for runway girder installation starting on October 23, 2024.

【Factory】

- Test operation of fuel handling equipment components underway in preparation to transport the equipment after the runway girder has been completed.



2． Steps taken when commencing fuel removal

FY2024 FY2025 FY2026

▼Now

Fuel removal work platform installation

Installation of fuel removal work platform ancillary equipment

①Opening made

②Runway girder installation

③Fuel handling equipment installation/ test operation

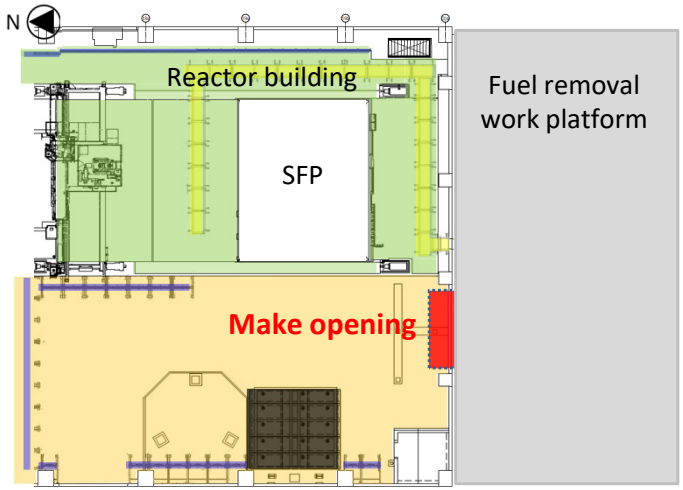
④Training

⑤Fuel removal

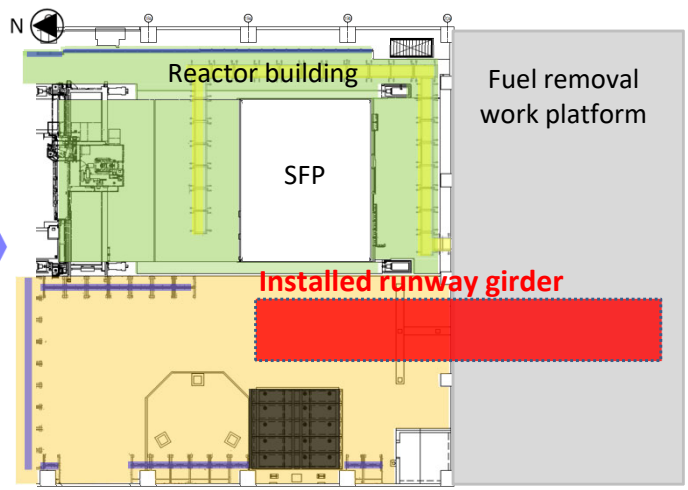
Transport

Fuel handling equipment manufacturing Being manufactured at the factory

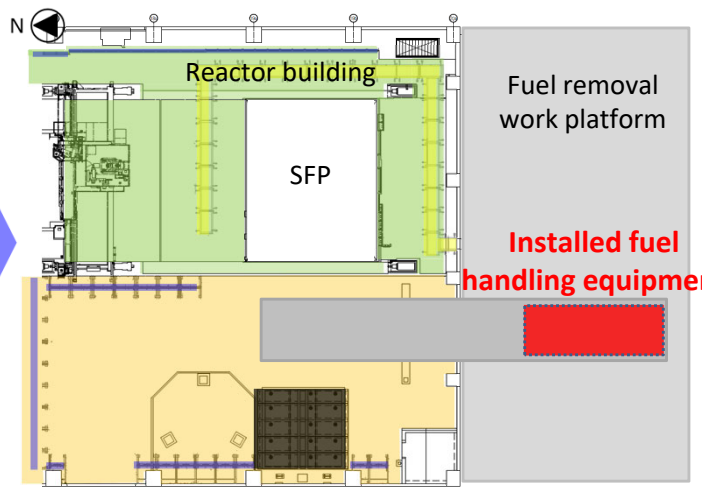
STEP①Make opening



STEP② Installed runway girder



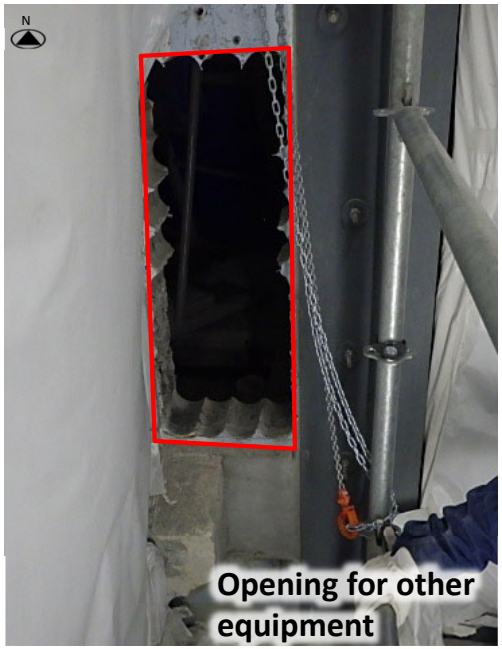
STEP③ Installed fuel handling equipment



3. Progress of opening work

- The opening for the runway girder was completed on December 9.
- Other openings for worker and other equipment (ITV equipment/lighting/emergency cooling water injection equipment) were completed on December 13.

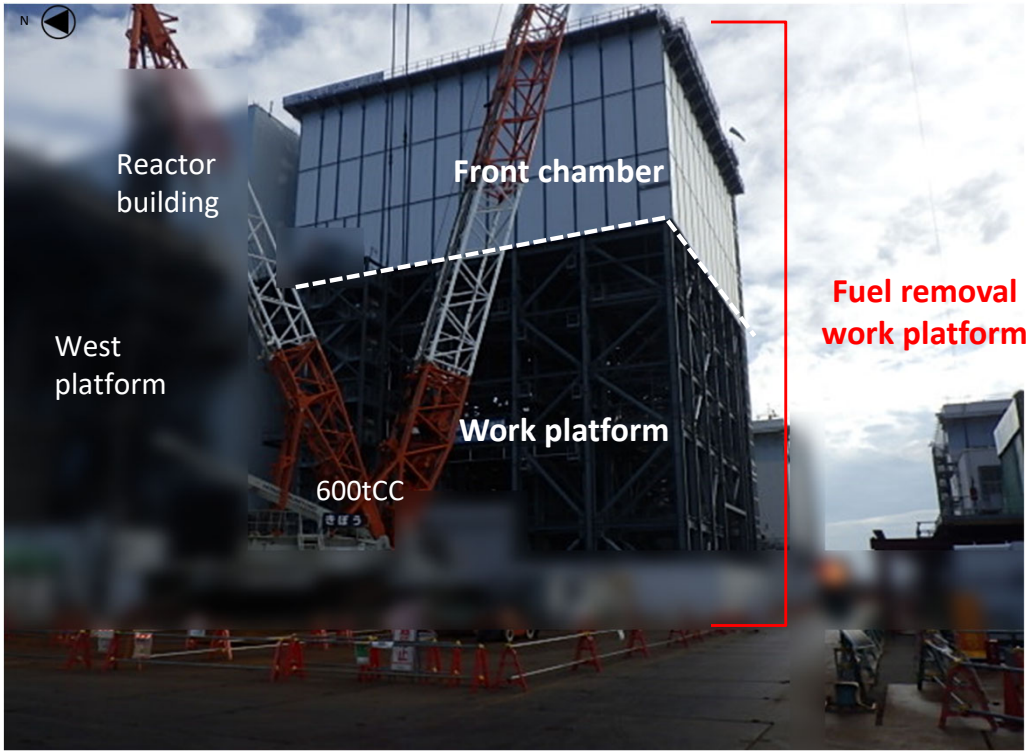
Photo①: Opening for the runway girder
（Photographed on December 6, 2024）
Photographed from the reactor building operating floor



Photo②: Openings for worker and other equipment
（Photographed on December 13, 2024）
Photographed from the south side work platform

4. Progress of runway girder installation work

- Installation of the runway girder framework began on October 24. (Six out of eight blocks have been carried into the front chamber).
- Currently, the runway girder framework is being built inside the front chamber.

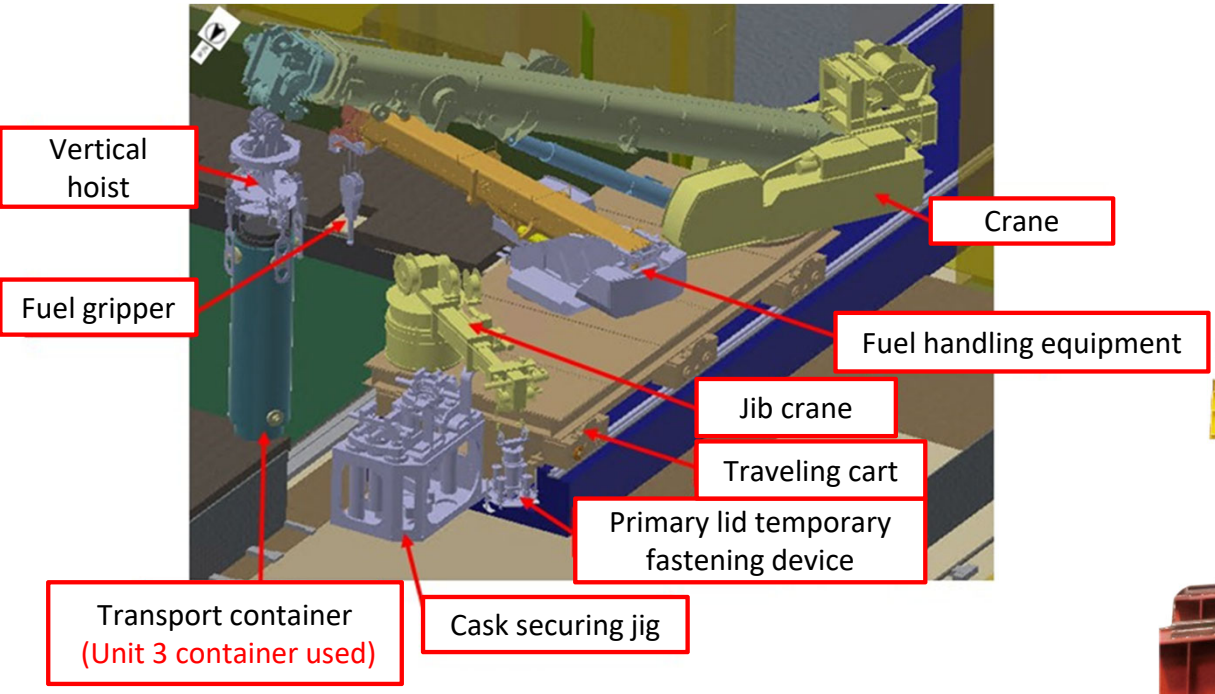


Picture of the work site (Southwest side)
(photographed on October 25, 2024)

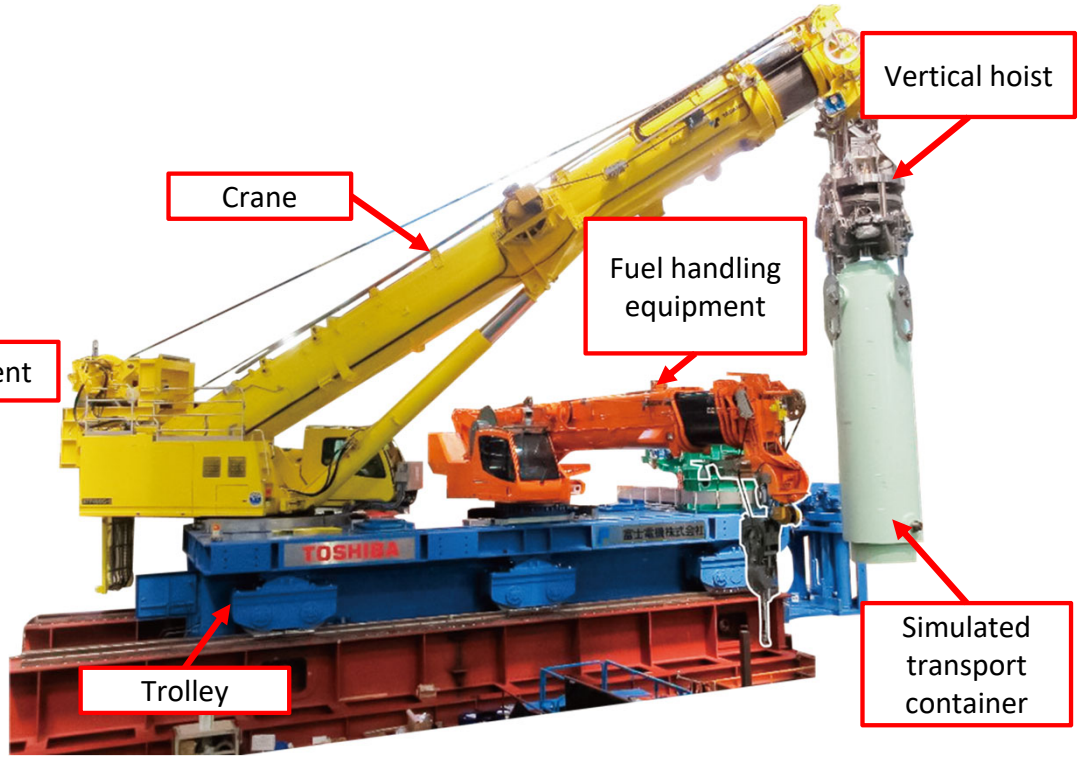
Runway girder framework installation
(Photographed on December 13, 2024)

5． Status of fuel handling equipment manufacturing

- Test operation of fuel handling equipment components is underway.
- After operational tests have been completed, the equipment will be packaged and transported via ship.



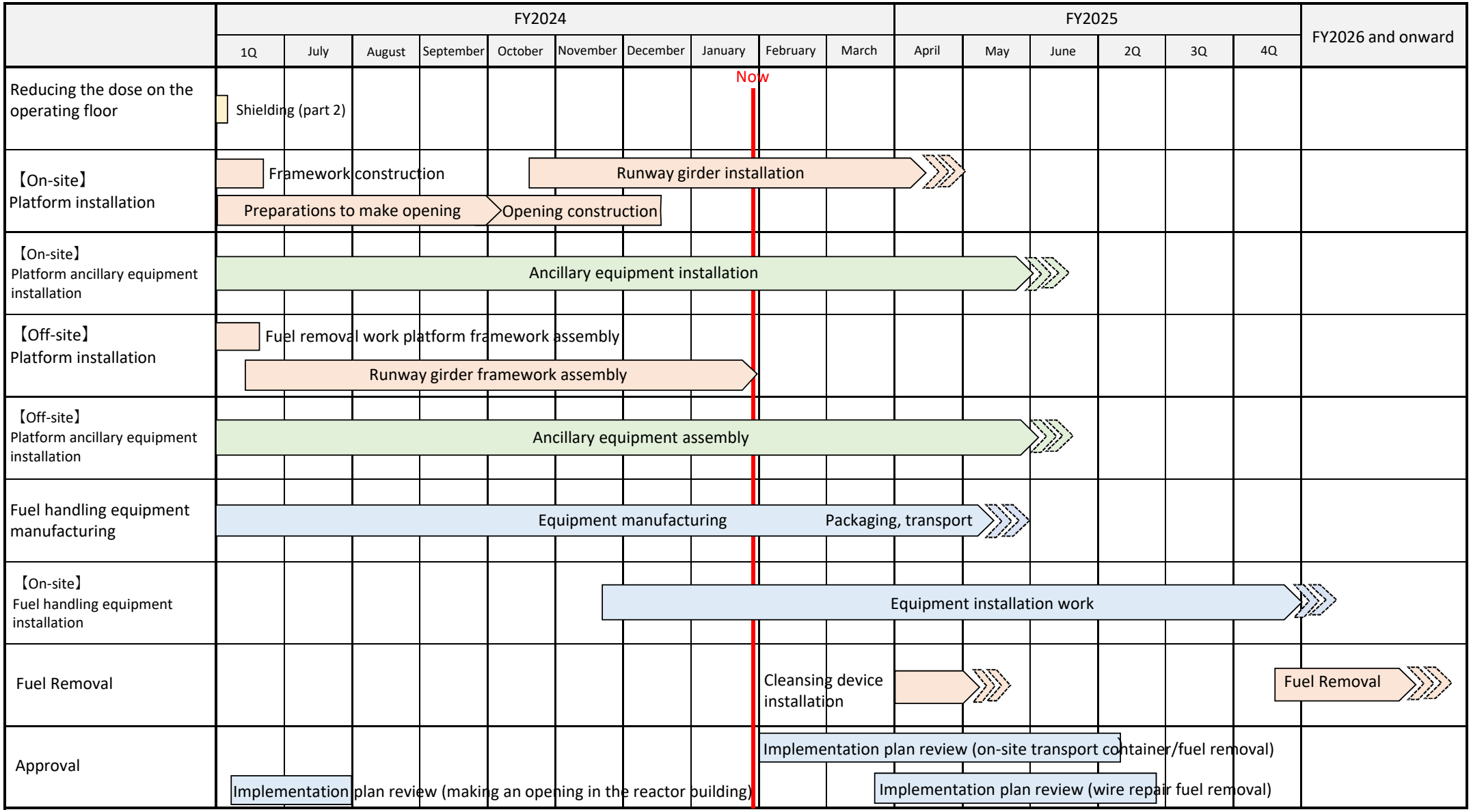
Fuel handling equipment diagram



Fuel handling equipment test operation (testing crane operation)

6. Schedule

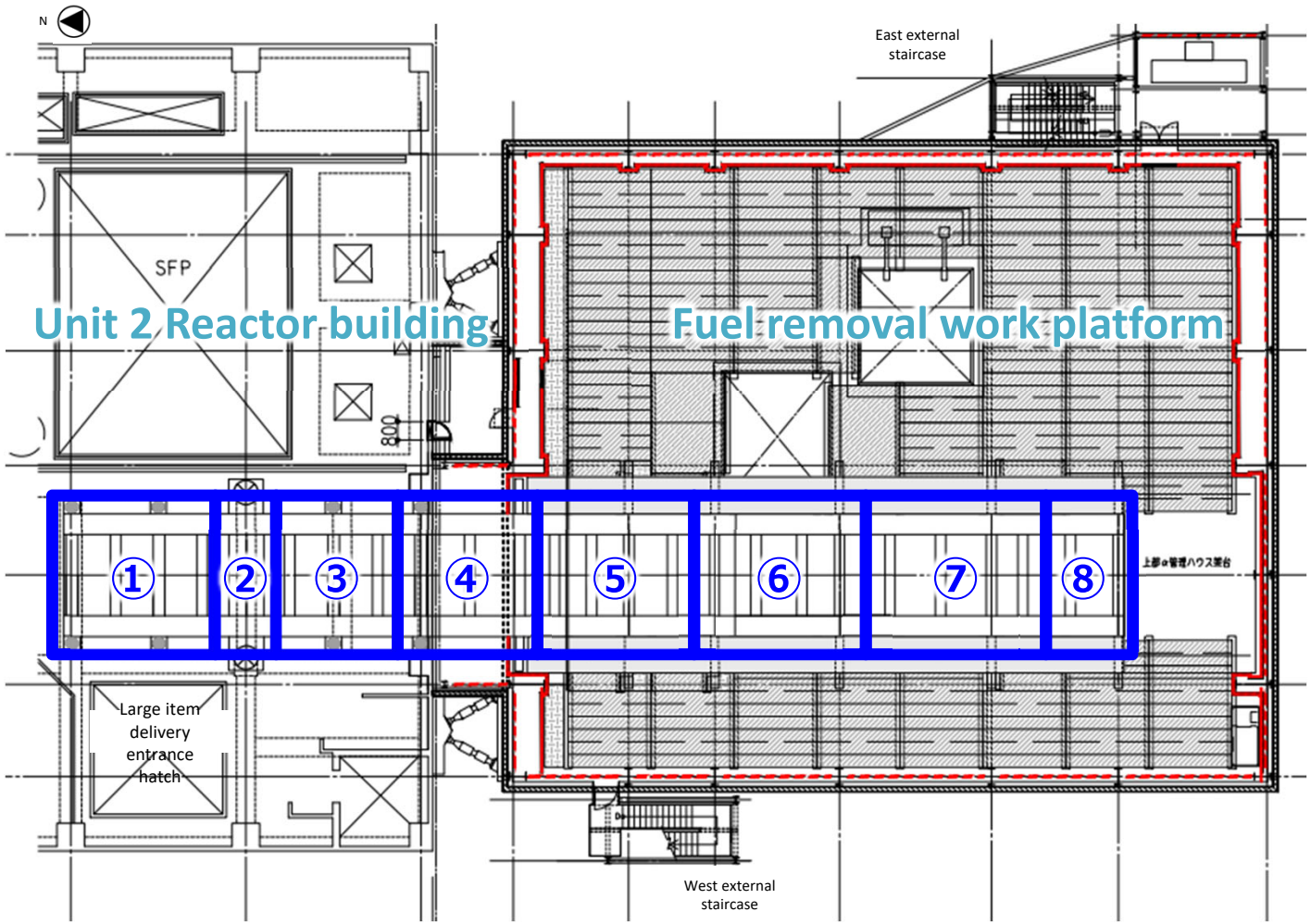
- Progress is being made according to plan in preparation for the commencement of fuel removal between FY2024~FY2026.
- we will continue to remain vigilant and prioritize safety.



※Changes may be made in accordance with schedule progress
※The line graph includes preparation/cleanup work periods

Reference 1. Platform construction (runway girder frame) block layout

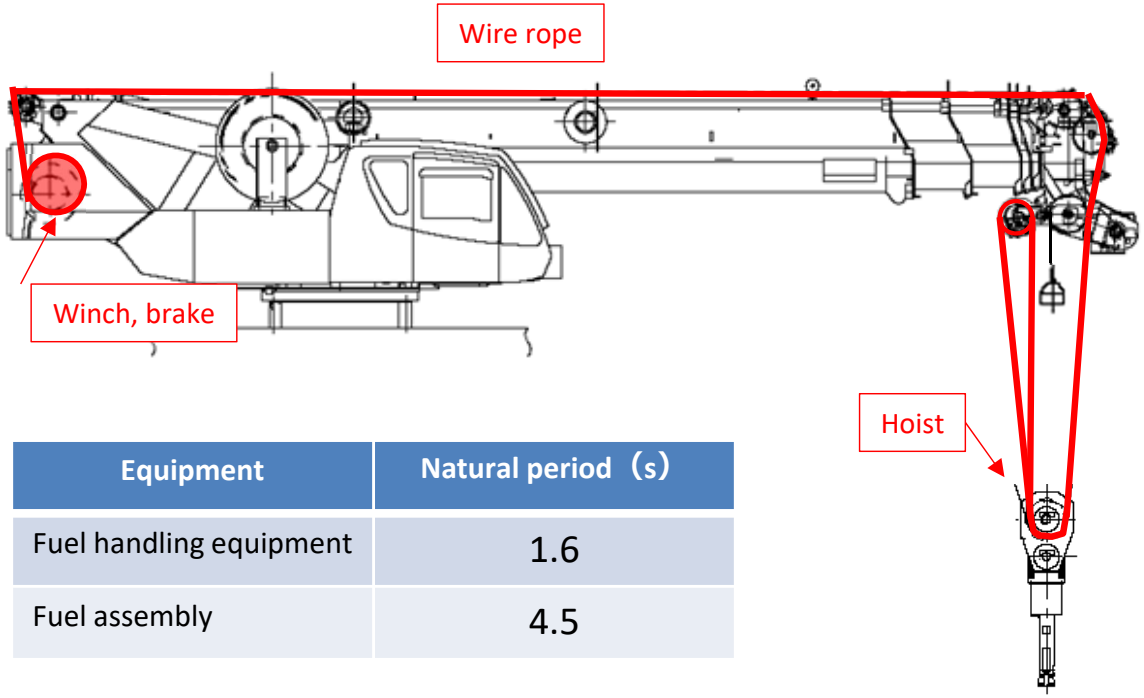
- The Unit 2 fuel removal work platform runway girder framework is comprised of **8 blocks** in total.



Runway girder framework block layout

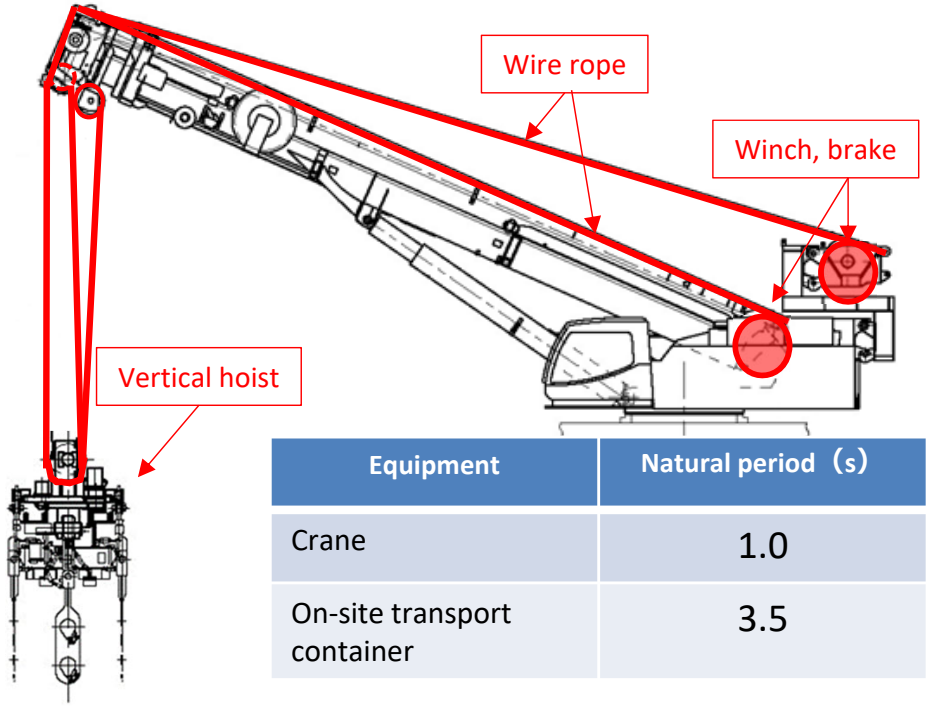
Reference 2. Horizontal effects on hoisted materials during an earthquake

- The following shows the routes by which seismic force could be transferred to hoisted materials from each piece of equipment.
  - ✓ Traveling cart ⇒ Fuel handling equipment (or crane) ⇒ Wire rope ⇒ Fuel assembly (or on-site transport container)
    - ① Since there is a wire rope in between the equipment and the hoisted material, the seismic motion should attenuate enough to result in small swaying of the hoisted load.
    - ② The natural periods of the fuel handling equipment and the crane boom are short and the natural period of the hoisted load is long, so there should be no effect from resonance.
- <u>Based on ①~② above, the risk of damage to the hoisted load or equipment from a collision is sufficiently small.</u>



Equipment	Natural period（s）
Fuel handling equipment	1.6
Fuel assembly	4.5

Fuel handling equipment diagram and natural period



Equipment	Natural period（s）
Crane	1.0
On-site transport container	3.5

Crane diagram and natural period