# Fukushima Daiichi Nuclear Power Station Unit 1 Progress of Fuel Removal from Spent Fuel Pool

September 25, 2025

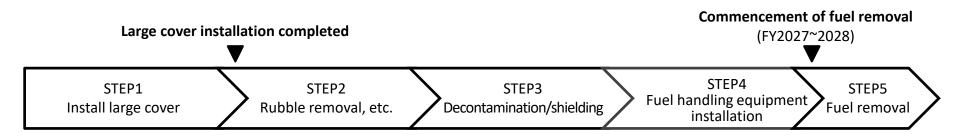


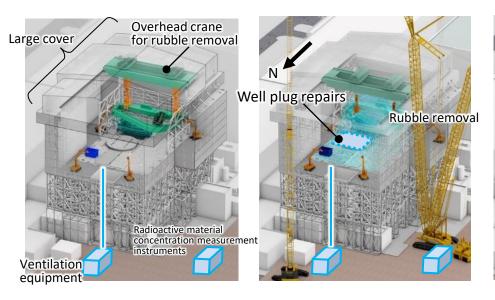
Tokyo Electric Power Company Holdings, Inc.

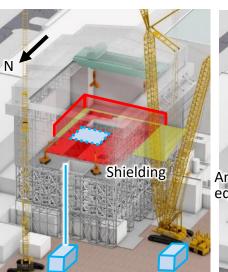
## 1. Fuel removal from the spent fuel pool plan overview

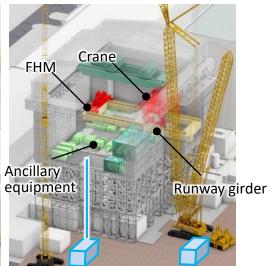


- The 392 fuel assemblies\* are being stored in the Unit 1 spent fuel pool will be removed in order to relocate them to the common pool where they can be cooled and stored in a more stable manner.
  - \* 292 spent fuel assemblies and 100 fresh fuel assemblies
- Prior to fuel removal, a large cover that encompasses the entire reactor building will be built, rubble removed from under the large cover, the operating floor decontaminated/shielded, and fuel handling equipment (fuel handling machine (FHM) and crane) installed.









## 2-1. Large cover installation status (on-site)



Installation of all 12 blocks of the upper framework was completed on August 28, 2025. And installation of the box ring is currently underway.

Box ring: 11/14 blocks completed (Previous performance + 7 blocks)

Temporary Anchor hole work platform (Completed) (Completed)	Baseplate Bottom Installation (Completed) (Completed)	(Annrox 78%)	Retractable crane for rubble removal
(Completed) (Completed)	(Completed) (Completed	(Completed \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	rubble removal

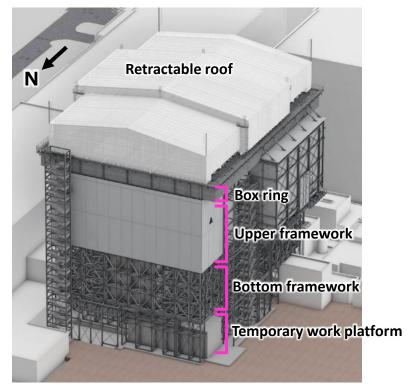
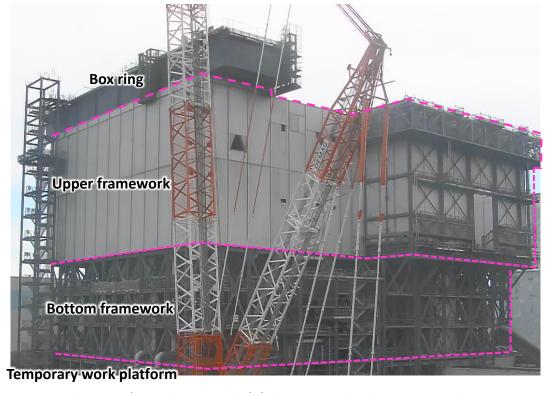


Diagram of the entire large cover



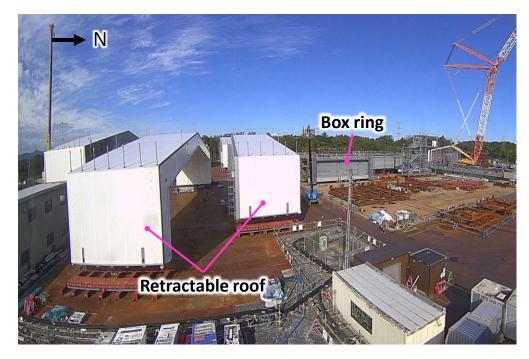
On-site conditions (Northwest side) (Photographed on September 23, 2025)

## 2-2. Large cover installation status (off-site)



- Semi-assembly of the retractable roof completed on July 30, 2025. And the overhead crane for rubble removal is currently underway.
  - Retractable roof: 7/8 blocks completed (Previous performance + 2 blocks)

Now **Temporary Bottom** Upper Overhead crane Retractable roof Box ring work platform framework framework for rubble removal (Approx. 87%) (Completed) (Completed) (Completed) (Completed) (Completed)



Off-site west gate yard (photographed on September 19, 2025)

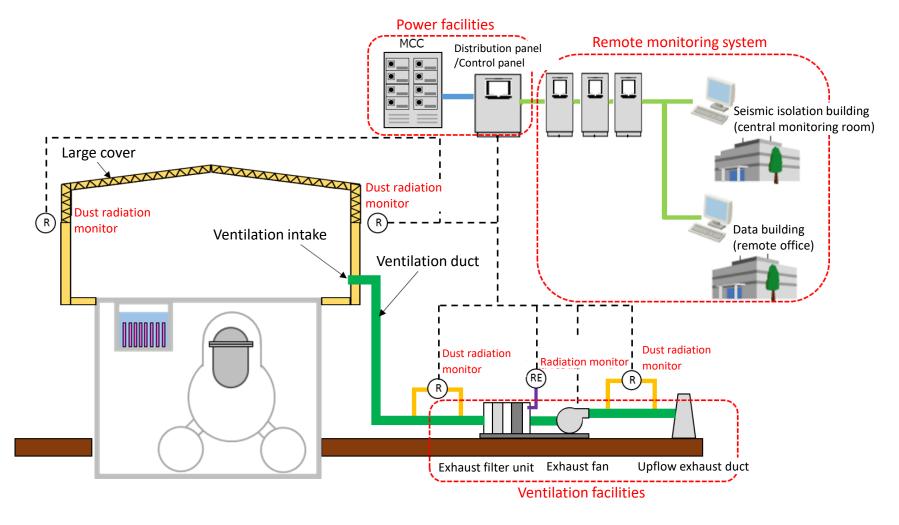


Off-site west gate yard (photographed on September 16, 2025)

## 3-1. Overview of large cover ancillary facilities



- After installation of the large cover, large cover ancillary facilities will be installed to remove rubble, etc.
- Large cover ancillary facilities include ventilation equipment, and dust radiation monitors, etc.

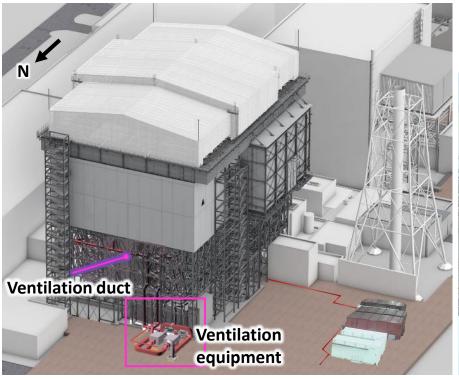


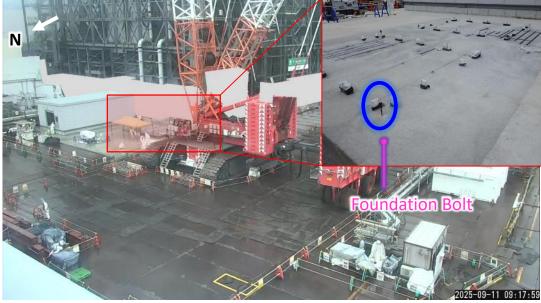
### 3-2. Status of large cover ancillary equipment installation (Ventilation facilities) T = CO



- Foundation bolt installation began on July 22, 2025. Foundation bolts are currently being installed prior to equipment installation.
  - Foundation bolt installation: 20/40 completed







Overview of large cover ancillary facilities

#### 3-3. Status of large cover ancillary equipment installation (Dust radiation monitors)



- Dust radiation monitor (hereinafter referred to as, "dust monitors") container installation began on July 15, 2025. Dust monitor container installation was completed on July 16, 2025. Dust radiation monitor pipe laying is underway
  - Dust monitor pipe laying: 420m/1600m completed

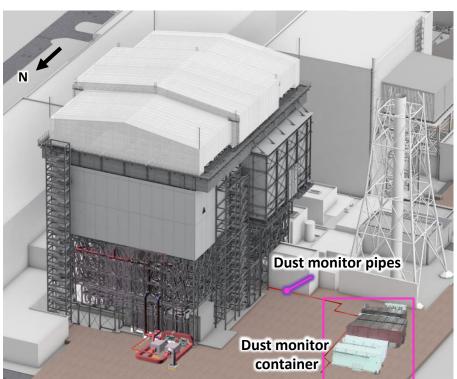
Dust monitor container installation (completed)

Dust monitor pipe laying (approximately 26%)

Remote monitoring equipment terminal installation

Trial operation adjustments

System switch over





<u>Diagram of large cover ancillary facilities</u>

Unit 1 Reactor Building NW Yard (photographed on September 11, 2025)

## 4-1. Repurposing the Unit 4 fuel handling machine for Unit 1



- In order to reduce waste, the fuel handling machine installed at Unit 4 in 2013 will be sent back to the manufacturer to be refitted and repurposed as the fuel handling machine for Unit 1.
- The following considerations are to be made when repurposing:
  - ✓ The equipment transports in accordance with law.

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  - ✓ All equipment taken out resend back to 1F from the manufacturer's factory.
  - ✓ All electrical components instruments, and fuel handling machines, etc. not to be repurposed shall not be transported and stored on site.
  - ※ Equipment will only be transported off-site after confirming that the surface contamination density does not exceed 1/10 of the limit stipulated in the Rules on the Safety and Protection of Specific Nuclear Materials and Facilities at the Tokyo Electric Power Company Holdings, Inc. Fukushima Daiichi Nuclear Power Station.



Off-site

#### Work flow

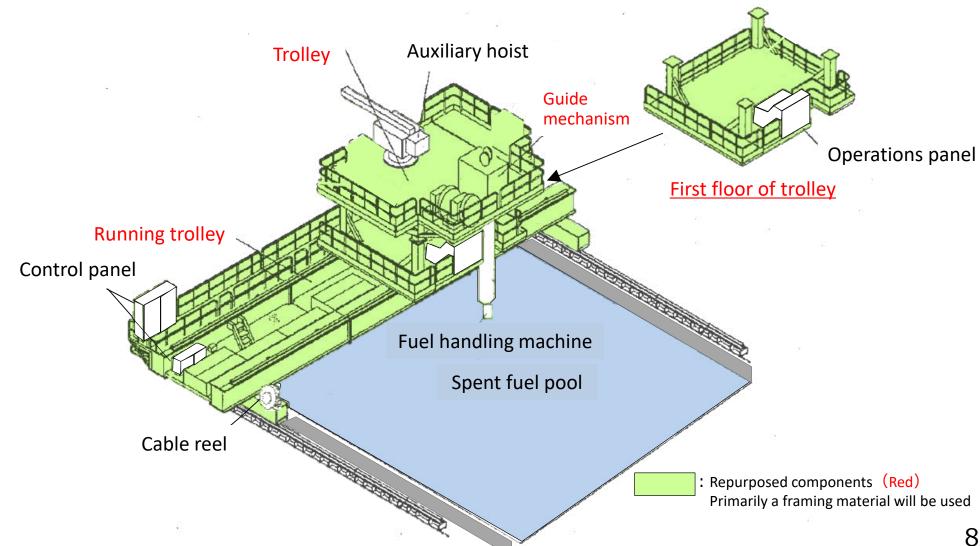


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## 4-2. Scope of repurposing of the fuel handling machine



The Unit 4 fuel handling machine will be repurposed as much as possible but there are some components that will need to be newly manufactured because they do not match the specifications of Unit 1 or because they have deteriorated but are no longer in production.



#### 5. Schedule



- The fuel handling equipment installation implementation plan was approved on September 8.
- Treatment of the ends of the surrounding steel frame was completed on September 5 and removal of the steel frame within the scope of this plan has been completed.
- Installations of Box ring and ventilation equipment on site are underway.

