Fukushima Daiichi Nuclear Power Station Unit 3
Status of Personnel Access Lock Room Investigation

＜Reference document＞
September 8, 2025
Tokyo Electric Power Company Holdings, Inc.
Fukushima Daiichi Decontamination & Decommissioning Engineering Company

- In preparation for the full-scale fuel debris retrieval from the Fukushima Daiichi Nuclear Power Station Unit 3, on August 19, 2025, we plan to commence an investigation of the personnel access lock room (P/A room) ※ in order to examine the environment on the first floor of the reactor building.
- In this investigation, we will measure the air dose rates and obtain point cloud data, etc. inside the P/A room.
- High-dose rates were confirmed inside the P/A room during an investigation in 2016, therefore remotely operated robots will be used.
- We are considering accessing the fuel debris using the X-6 penetration and X-1B penetration, etc. Through this investigation, in order to deliberate whether any penetrations other than these penetrations can be used for fuel debris retrieval, we will also check the appearance of the X-2 penetration in the P/A room.
- The results acquired during this investigation will also be leveraged to the deliberation of full-scale fuel debris retrieval method and environmental preparations.

(Announced on August 18, 2025)

※1 The P/A room was used by workers when entering the reactor to perform work and inspections, etc.

- Remotely operated robots have been used to measure air dose equivalent rates, and acquire point group data, and to take video footage inside the P/A room. Results show that the air dose equivalent rates are lower overall compared to the results of the 2016 investigation.
- Based on this information, it was decided that installing and removing investigation equipment to perform the gamma-ray imager investigation by hand will better reduce exposure than using remotely operated robots, and measurements will be taken at five locations starting on September 9, 2025.
- If the investigation proceeds smoothly, should be completed by the middle of September. We will continue to prioritize safety as we move forward with this task.

Gamma-ray imager

Device that can analyze gamma-ray distribution and generate an image from that data by combining hot spot identification function with point group data acquisition function

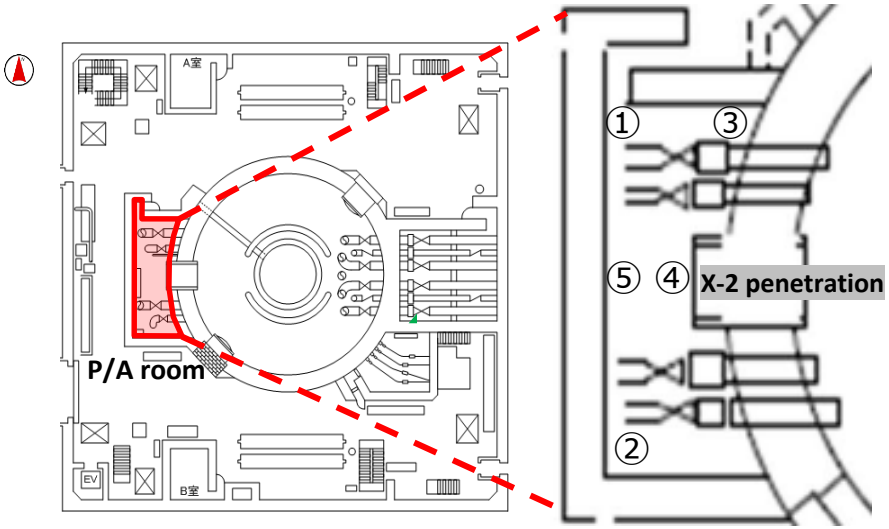
Air dose equivalent rate measurement results

■ Air dose equivalent rate measurement results (Unit: mSv/h)

Measurement points	①	②	③	④	⑤
2016 measurements (height: approx. 100cm)	13	80	50	60	80
Measurements from this investigation (height: approx. 150cm)	7	36	34	29	32

※ The measurement points do not exactly match those used during the 2016 investigation, but are close to locations ① ~ ⑤ used for the 2016 measurement

■ Bird's-eye view of the first floor of the Unit 3 reactor building



Remotely operated robots used to take measurements of air dose equivalent rate, etc.

SPOT

Equipped with cameras, dosimeter, and lidar

Move around inside and investigate the P/A room

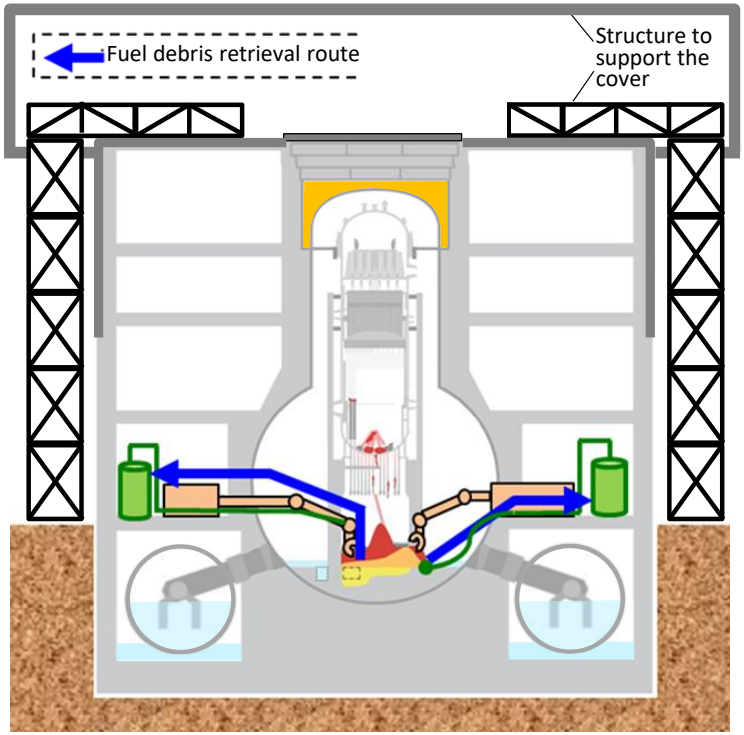
Packbot

Equipped with a dosimeter

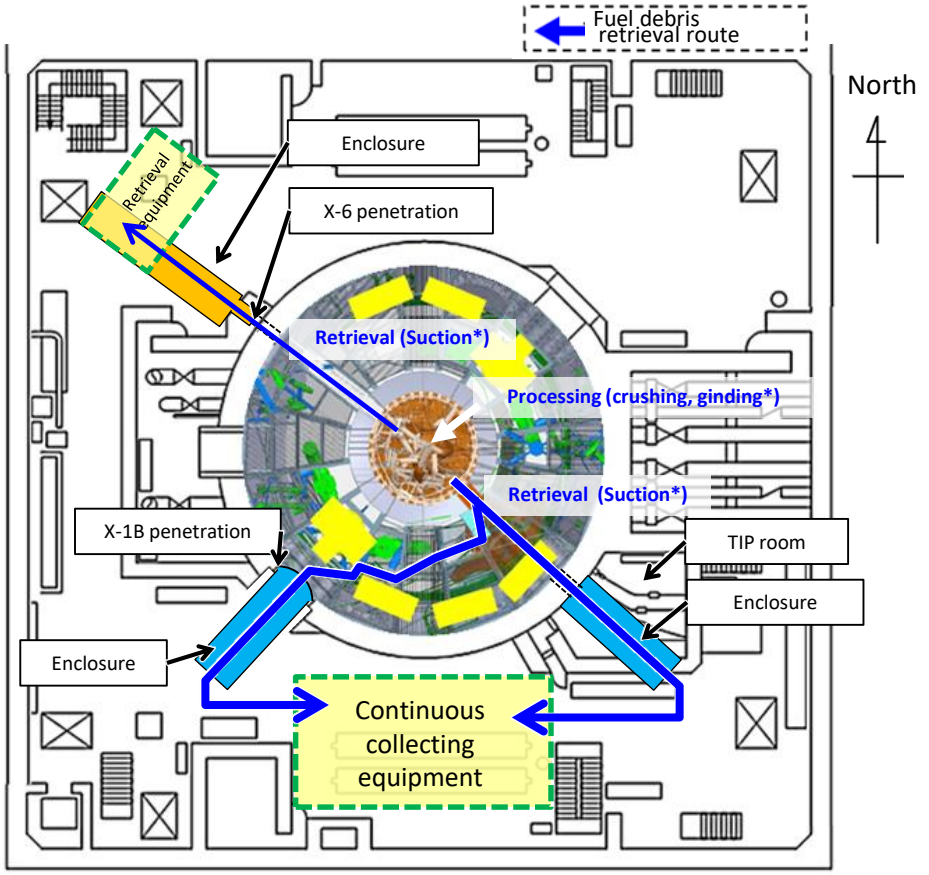
Move around inside and investigate the P/A room

[Reference①] Appendix④ Overview of Side Access Retrieval

- Primary containment vessel penetrations, such as X-6 penetrations on the first floor of reactor building, will be leveraged during side access point retrieval.
- Therefore, it is assumed that doses inside primarily the reactor building will be reduced during side access point preparations.



Cross section of reactor building



※Current assumptions. Decision is made based on “verification of processing and retrieval technologies”.

Bird’s-eye view of the first floor of reactor building

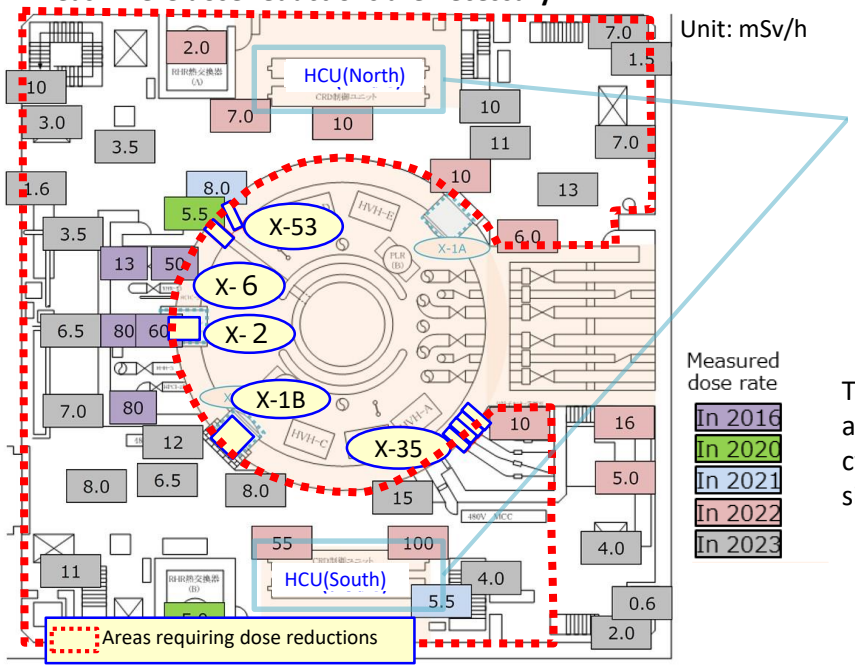
[Reference②] 2. Overview of the fuel debris retrieval method design deliberation from Unit 3
2.2 Retrieval method selection deliberation plan (3/4)

TEPCO

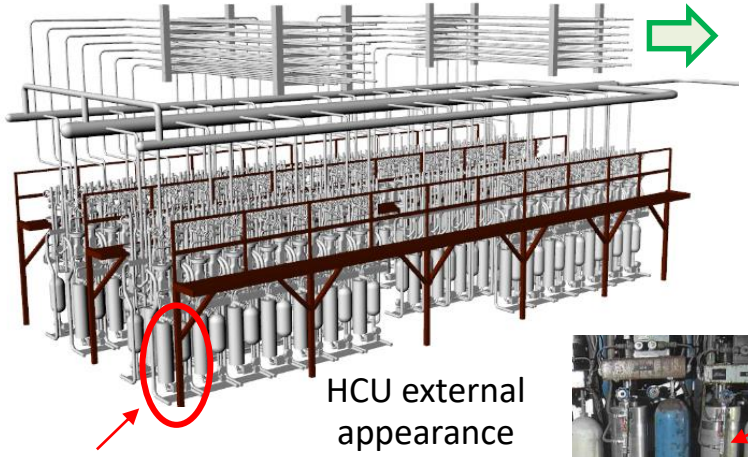
Advancement of environmental improvement (cont.)

[Inside the reactor building]

[First floor of the reactor building]
Areas where dose reductions are necessary

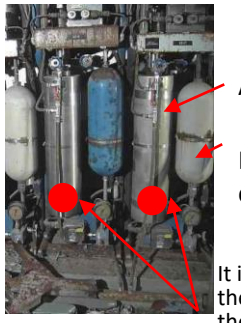


Connected to PCV



HCU external appearance

There are a total of 137 accumulators and nitrogen cylinders on the north and south sides.



HCU external appearance

It is estimated that there is a hot spot at the bottom of the accumulators.

【Major issues expected】

- **The radiation level on the first floor of the reactor building is generally high.** (Decontamination efforts to date have not been able to sufficiently reduce dose levels.)

⇒ Going forward, hot spots will be identified and dose reduction measures, such as removal and shielding, etc., repeatedly implemented.

【Major issues expected】

- **The HCU (CRD control unit) highly radioactive**
  - ✓ There are 137 units on the north and south sides of the HCU, each requiring individual handling.
  - ✓ Dose levels are high because the HCU system is connected to the PCV.

⇒ Identify contaminated areas in the HCU, and reflect this information in the construction plan in the form of shielding or removal, etc..

*: Dose reduction measures will be implemented on the second floor as necessary.