

Decommissioning Process “**Dismantling PCV/RPV/Buildings**”
Investigation Subject “**Dismantling scenarios**”
Issue “**Planning dismantling scenarios and sorting strategy**”

Needs

1. Establishing dismantling scenarios and planning a waste sorting strategy

Dismantling PCV/RPV/Buildings : [Long 1]

Desired state and reasons for it

- In order to efficiently and effectively dismantle the PCV/RPV/buildings, it is desirable to establish a dismantling scenario for what order and method to dismantle the PCV/RPV/building.
- In addition, since most of the waste generated by dismantling will become radioactive waste if no measures are taken, and space for storage and disposal may be insufficient, it is also desirable to establish a waste sorting strategy with clearance in mind, along with the above dismantling scenarios.

Current state against ideal

- The “Mid-and-Long-Term Decommissioning Action Plan 2024” released by TEPCO on March 28, 2024, does not indicate specific details on the dismantling scenario and timeframe of the PCV/RPV/buildings.
- Although investigations have been conducted on the processing of the wastes such as rubbles removed for further expansion of fuel debris retrieval and secondary waste generated from contaminated water treatment, no investigations, including estimates, have been conducted on waste generated during dismantling of PCV/RPV/buildings.
- Since rubbles, etc. generated in large quantities was contaminated by fallout, while previous waste storage and management practices have incorporated classification using surface dose rate as an indicator. It is planned to understand radioactivity concentration to recycle of the waste inside the facilities in the future.
- Efforts are being made to address the waste hierarchy, which consists of the priorities of (1) waste generation reduction, (2) waste volume minimization, (3) reuse, (4) recycling, and (5) disposal, as practiced in other countries.

Issues to be resolved

- It is desirable to develop multiple options after investigating a base-case dismantling scenario.
- It is desirable to investigate waste sorting strategies in close coordination with Issue Nos. DRB-101, DRB-202, DRB-205, PDR-101, PDR-102, and PDR-301.

Relevant Issues

- DRB-102 “Understanding properties and volume of objects to be dismantled”

- DRB-202 "Establishing sorting criteria by alpha, beta and gamma contamination"
- DRB-204 "Establishing work sequence"
- DRB-301 "Removing in-core structures and dismantling buildings"
- BST-006 "Risk assessment"