

Progress Status of “Roadmap towards Restoration from the Accident at Fukushima Daiichi Nuclear Power Station”

1. Basic policy (no change)

By bringing the reactors and spent fuel pools to a stable cooling condition and mitigating the release of radioactive materials, we will make every effort to enable evacuees to return to their homes and for all citizens to be able to secure a sound life.

2. Targets

[Step 1: Radiation dose is in steady decline]

- In the past two months, radiation dose values via the monitoring post readings etc. has been declining.
- On the other hand, since the radioactivity concentration in the seawater at the site port still remains high, decontamination via starting the operations of the Circulating Seawater Processing Apparatus has begun (June 13).
- The following will be implemented in order to achieve the set targets within one month, especially the “stable cooling” of the reactors;
 - Without the rise of accumulated water, injecting the necessary volume of water to remove heat generated inside the reactors (Start of circulating injection cooling)
 - Prevention of hydrogen explosion (nitrogen injection)
- Successful implementation of “circulating injection cooling” is predicated on the stable operations of processing facility hereafter.
- “Stable cooling” targets for the spent fuel pools are expected to be achieved in one month and applied to all units.

[Step 2: Release of radioactive materials is under control and radiation dose is being significantly held down]

- Target achievement dates remain the same.

3. Summary of progress made in the last one month and planned actions (main changes)

1. Added areas and issues Please refer to the attached “Appendix 1: Current status of Roadmap (issues/targets/major countermeasures)”

- The previous roadmap (May 17) set 5 areas (“Cooling”, “Mitigation”, “Decontamination/Monitoring”, “Countermeasures against aftershocks etc.”, “Environment improvement”) and 8 issues (“Reactors”, “Spent fuel pools”, “Accumulated water”, “Groundwater”, “Atmosphere, Soil”, “Measurement, Reduction, Announcement”, “Tsunami, Reinforcement, etc.”, “Life/work environment”).
- Reflecting progress made in the last one month, 1 issue (“Radiation control, Medical care”) was newly added, resulting in 5 areas and 9 issues.
- Number of countermeasures against issues increased to 81 from 76 accordingly.

2. “Issue 1. Reactors”: Slated to begin circulating injection cooling

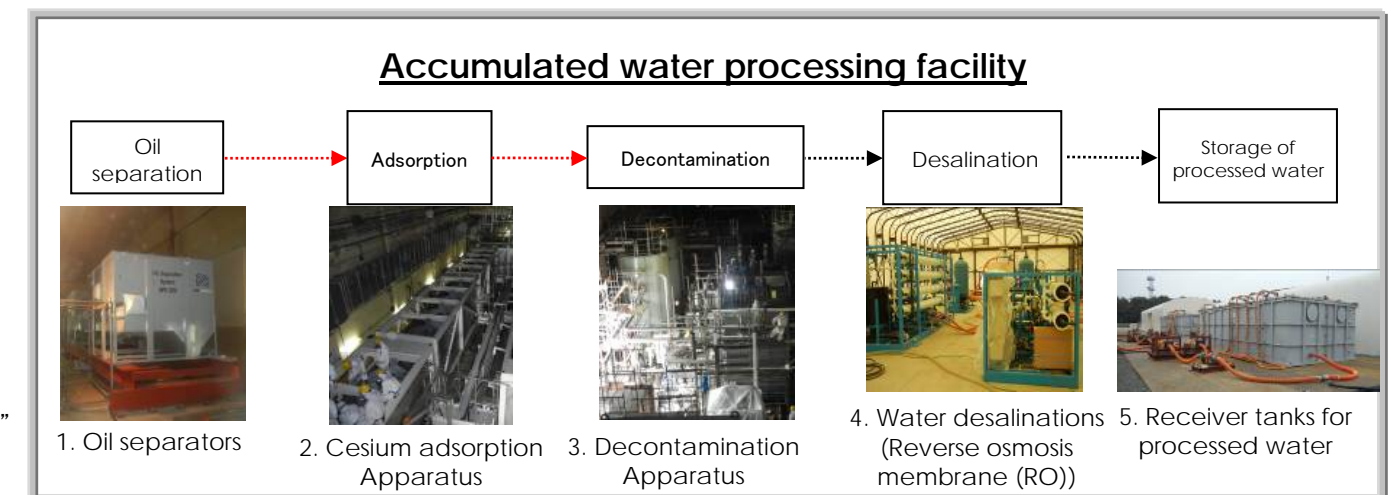
- The completion of piping installation construction work etc. and the operations of accumulated water processing will lead to the start of circulating injection cooling.
- Nitrogen injection into Units 2 and 3 will start in about a month (it is already undergoing for Unit 1).

3. “Issue 2. Spent fuel pools”: Began circulating injection cooling in Unit 2

- Circulating injection cooling by heat exchangers has begun for Unit 2 in fulfillment of the “more stable cooling” target set in Step 2 (May 31).
- Water injection into the original piping for Units 1 and 3 has begun in fulfillment of the “stable cooling” target of water injection inside the buildings set in Step 1 (Unit 1-May 29, Unit 3-May 16).
- Aim to achieve the “stable cooling” target for Unit 4 in one month.

4. “Issue 3. Accumulated water”: Slated to begin operations of the processing facility

- Slated to begin operations of the processing facility. To mitigate the risk of unintended leakage to the environment, the water inside the building will be decontaminated.
- Securing the stable operations of this processing facility is the key. Expansion of tanks or other processing facilities etc. are being considered (August target).
- There are plans to gradually add more tanks to increase capacity (13,000 tons has already been installed. 40,000 tons will be installed in July followed by 20,000 tons monthly thereafter).
- Sludge waste with high radioactivity concentration generated during the water processing will be properly stored.



5. “Issue 9. Radiation control, Medical care”: Propelling evaluation of radiation exposure and countermeasures against heat strokes during the summer

< Radiation control >

- Strict supervise of working hours according to each work
- With support of the government, Increasing the number of whole-body counters (internal radiation dose measuring instrument)
- Automated recording of individual APD (Pocket Dosimeter)

< Medical care >

- 24-hour doctor’s office in the Main Anti-Earthquake Building with the aid of the government
- Expansion of doctor’s office and deployment of several more doctors
- Continuous expansion of rest areas