# Summary of Progress Status of "Roadmap towards Restoration from the Accident at Fukushima Daiichi Nuclear Power Station, TEPCO"

## 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 and achievement date, etc.

[Step2: Release of radioactive materials is under control and radiation dose is being significantly held down]

- There is no change in the target and achievement date. As for the [Issue (2) Spent fuel pools], the Step2 target has been achieved.
- The total volume of the accumulated water has decreased to a level that is able to withstand heavy rains and long-term processing facility outage. Currently, the circulating water cooling is ongoing and being enhanced
- RPV bottom temperatures reached 84 of Unit 1, 113 of Unit 2 and 91 of Unit 3 (as of Sep. 19), and keeps below 100 at Unit 1. Hereafter implement effective water injection for Units 2 and 3 as well and control the release by



monitoring RPV bottom temperatures, etc., thus aiming to achieve a "cold shutdown condition".

- After that, provide a final assessment of the amount of released radioactive materials from the monitoring results. In the meantime, until the final assessment, continuously assess the amount of released radioactive materials and announce the results.
- Will confirm the more stable cooling of reactors, etc. as well as controlling/mitigating the release of radioactive materials via such measures.

## 3. Summary of the last one month and future plans (major changes)

## [Issue (1) Reactors]: Additional water injection line for more effective cooling

- In addition to the feed water line, water injection via the Core Spray (CS) has begun at Units 2 and 3 (Sep. 14 for Unit 2 and Sep.1 for Unit 3.)
- \*Injecting water via feed water line and CS Water injection volume; Unit1-approx. 3.6m<sup>3</sup>/hr, Unit 2\*-approx. 7.6m<sup>3</sup>/hr, Unit 3\*-approx. 12m<sup>3</sup> /hr.
- RPV bottom temperatures in Unit 1 keeps below 100 . Aim for below 100 in Units 2 and 3 as well, • determining the sufficient water injection volume to achieve a cold shutdown.

## [Issue (3) Accumulated water]: The accumulated water level has reached the point where it is able to withstand heavy rains as well as

- long-term processing facility outages Regarding accumulated water processing performance, approx. 95,420 tons have been processed in total (as of Sep. 18) and the average availability factor for one week is 83% (as of Sep. 18.) The accumulated water level has reached the target level of O.P 3,000(as of Sep.11.)
- Installed cesium adsorption apparatus (SARRY) towards stable processing. Completed the augmentation of decontamination facility (Aug. 18.)
- Desalination processing facility utilizing the evaporation concentration apparatus is being reinforced (mid of Oct.)



[Issue (4) Groundwater]: Complete the basic design of the water shielding walls (Aug. 31) The design specifications for construction are under consideration.

## [Issue (5) Atmosphere/Soil]: Began debris removal from the top of the Unit 3 reactor building Began debris removal from the top of the Unit 3 reactor building (Sep. 10), Unit 4 soon to follow after.

- Organize and store the removed debris etc., at designated storage areas.
- Began manufacturing of the PCV gas control system (Aug. 18.)

## [Issue (6) Measurement, Reduction and Disclosure]: Evaluate the amount of radioactive materials currently released

- The individual current release rate from Units 1 to 3 has been evaluated utilizing the airborne upper parts of the reactor buildings.

  - The radiation exposure per year at the site boundaries is assessed at 0.4 mSv / year provisionally (excluding the effect of the radioactive materials already released up until now.)



- planned to be implemented in the future.
- "Basic Concept for Pushing Ahead with Decontamination Works" and "Basic Policy for Emergency • Response on Decontamination Work", etc. have been established (Aug. 26.) From the end of August,

[Issue (7) Tsunami, Reinforcement, etc.]: Completed seismic resistance evaluation for each Unit (Aug. 26) [Issue (8) Living/working environment]: Completed construction of temporary dormitory able to accommodate scheduled 1,600 persons (Aug. 31) [Issue (9) Radiation control/medical care]: Improved Health Care for workers

 Changed Units 5/6's emergency medical room's period of operations from summer-only to all year round. Began deployment of nurses and radiation specialists.

[Issue (10) Staff training/personnel allocation]: Continuously implement radiation staff training

Appendix 1

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Nuclear Emergency Response Headquarters Government-TEPCO Integrated Response Office

radioactivity concentration (dust concentration) in surrounding area (land and sea) and at the

• The current total release rate is assessed at 0.2 billion Bq/hr, which is 1/4,000,000 of that at the time of the accident\*. \*Decrease than previous version because the decrease of maximum release rate at the time of the accident in NSC reassessment (Aug. 22).

Continuously implement the measurements of airborne radioactivity concentration in surrounding area (land and sea) and at the upper parts of the reactor buildings, thus grasping the reduction tendency of the reduced amount from mitigation countermeasures. More accurate assessment is

the implementation of decontamination operations has begun in Date City and Minamisoma City.