Nuclear Emergency Response Headquarters Government-TEPCO Integrated Response Office

## 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 the achievement date. Regarding the fuel pools, the Step2 Target has been achieved (Aug. 10).
- Regarding the accumulated water, stable operation of the processing facilities will be endeavored with the aim of reducing the total volume of accumulated water.
- After reducing the accumulated water, increase injection water rate by continuous and reinforced circulating injection cooling, thus bringing the reactors to a "cold shutdown condition" monitoring temperatures at the bottom of RPV, etc.
- Improve monitoring accuracy and continue assessing current release of radioactive materials.
- Bring the reactors etc. to a more stable cooling and control and mitigate the release of radioactive materials by the above measures.
- Newly added [Issue (10) Staff training/personnel allocation]

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

#### [Issue (1) Reactors]: Confirm functional securement of the water injection system

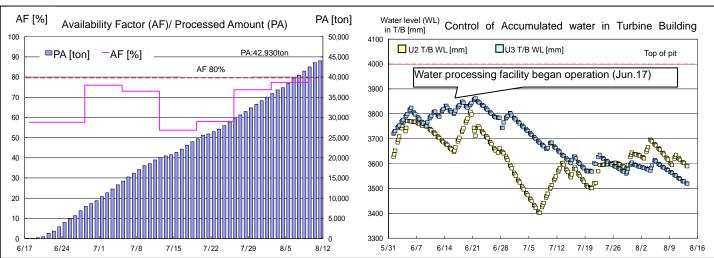
- Assessed functions of the water injection system: (a) structural strength and seismic safety of facilities; (b) cooling capacity; (c) operations and maintenance management; (d) countermeasures against loss of functions (Aug. 3, 4.)
- Hereafter, change water injection rate on a trial basis and verify the water injection rate needed to achieve the "cold shutdown condition."

### [Issue (2) Spent fuel pools]: Achieved "more stable cooling" for all Units 1 to 4

 Achieved "more stable cooling" set in Step2 with regard to Units 1 and 4 as well by starting circulating cooling (Aug. 10 for Unit 1 and Jul. 31 for Unit 4.)

# [Issue (3) Accumulated water]: Implementing reliability enhancement measures towards stable processing

 Total volume of accumulated water processed to date is approx. 44,020 tons. Availability factor for the last one week was 77 % (as of Aug. 9.) The water level of the accumulated water sufficiently dropped under the top of pit.



- Implemented reliability enhancement measures towards stable processing.
  - · Implemented maintenance work for the processing facilities such as installing a by-pass line to secure water flow (Aug. 4.)
  - · Augmented the facility such as installing cesium adsorption facility (SARRY) (operation planned to commence on Aug. 18.)
  - Augmented desalination processing facilities by augmentation of the evaporative concentration apparatus (two lines, Aug. 7 and 20.)
- Hereafter, will steadily process the accumulated water in order to reduce it.



#### [Issue (4) Groundwater]: Preparing installation of underground water shielding walls

• Designed water-proof steel plate piles to be installed in front of existing seawalls for Units 1~4 in order to ensure prevention of expanding seawater contamination due to underground water.

# [Issue (5) Atmosphere/Soil]: Began steel-frame work for the Unit 1 reactor building cover (Aug. 10) [Issue (6) Measurement, Reduction, and Disclosure]: Continue to assess current release of radioactive materials

- TEPCO has assessed current value of released amount from Unit 1 to 3 thorough the same way as announced on Jul. 19:
  - The release rate on the assumption that all measured radioactivity arises from the current emission from the reactor buildings is evaluated to be approximately two-hundred-million Bq/hour (This is approximately ten millionth of the emission rate after the accident.)
  - Excluding the effect of already released radioactive materials, evaluation of exposure doses at the site boundary using the current release rate showed that the maximum exposure dose is 0.4 mSv/year
- Analyze the effect of reducing release as well as improve accuracy of estimated exposure doses through measures including measuring the radioactive materials concentration around the reactor buildings, measuring radioactive materials newly falling at survey points, etc.
- Consider and start full-fledged decontamination.

# [Issue (7) Tsunami, Reinforcement, etc.]: Installed support structures at the bottom of the fuel pool of Unit 4 (Jul. 30)

#### [Issue (8) Living/working environment]: Improve Living/working environment for workers

- Plan to build temporary dormitories capable of accommodating approx. 1,600 people; approx. 1,200 people have already moved in (as of Aug. 15.)
- Sixteen on-site rest stations have been established (approx. 3,500m² in size with a capacity to accommodate approx. 1,200 people) (as of Aug. 15.)

#### [Issue (9) Radiation control/Medical care]: Improve worker health care

- Increase the number of whole body counters as planned (6 units have already been added as of Aug. 11.)
- Announced the creation of database as well as a framework of comprehensive long-term health care as a "Grand Design" (Aug. 3.)
- Consideration with relevant organizations regarding the provision of a speedy transportation of patients.

#### [Issue (10) Staff training/personnel allocation]: Sort out as new issues

- Promote staff training, etc. in conjunction with the government and operators in order to train and deploy staffs systematically.
  - · Conducting training for staffs engaged in radiation related work, who will be in great demand.
  - · According to affiliated companies needs, launched a new framework of looking for specialized technical workers widely through Japan Atomic Industrial Forum (JAIF).