

**Increase of water injection through the core spray
system of
Unit 2 and Unit 3 of Fukushima Daiichi Nuclear
Power Station**

September 16, 2011

Tokyo Electric Power Company



東京電力

Purpose of diversification of water injection line into reactor

Target of Step 2

Release of radioactive materials is under control and radiation dose is being significantly held down.

(Mission)

- Continue circulating water cooling and monitor temperature of pressure containment vessel and achieve “cold shutdown condition”.

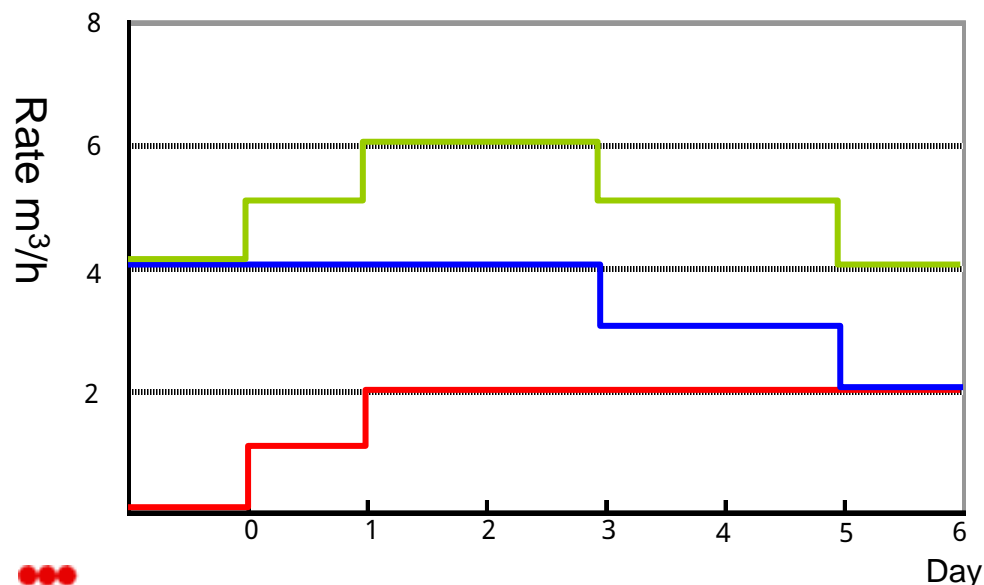
Treatment of retained water is satisfactory and more certain cooling of reactor achievable by increasing injection water.

Increase of water injection through core spray system

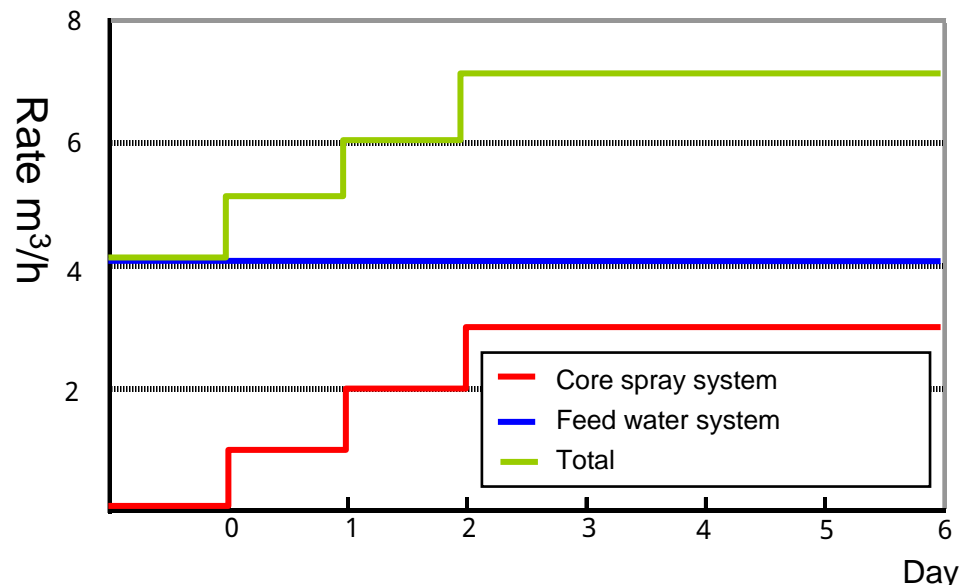
Current status of water injection through core spray system and action plan for Unit 2

- Water injection through core spray system commenced from September 14, for Unit 2.
- Water injection through core spray system seems to have reached into the reactor as increase of pressure for reactor containment vessel was observed after commencement of water injection.
- Temperature of pressure containment vessel has totally increased temporarily, however, they are in the trend of moderately decreasing.
- As the effectiveness of water injection through core spray system was confirmed, from today (September 16) we will increase water injection level through core spray system to 3m³/h and keep that rate (we will not change water injection rate through feed water system with current rate of 4 m³/h).

Water injection rate (before change of plan)



Water injection rate (after change of plan)



Plan of water injection through core spray system for Unit 3

- Currently, water has been injecting at the rate of 3m³/h through core spray system and at 4m³/h through feed water system, 7m³/h in total, for Unit 3.
- To determine volume of water to achieve cold shutdown condition, today (September 16), we will increase water injection rate through core spray system up to 8m³/h (we will not change water injection rate through feed water system with the current rate of 4m³/h), 12m³/h in total. We will continuously monitor the temperature of top and bottom of pressure containment vessel.
- To maintain subcritical state with more certainty, we inject boric acid before changing water injection rate and continuously monitor there is no adverse effect.

