#### Plant Status of Fukushima Daiichi Nuclear Power Station

February 7, 2012 Tokyo Electric Power Company

<Draining Water on Underground Floor of Turbine Building (T/B) >

Status of highly concentrated accumulated radioactive water treatment facility and storage tank facility [Treatment Facility]

- At 18:42 on January 17, 2012: We actuated Cesium adsorption apparatus. At 18:45, the flow rate reached steady state.
- At 11:12 on February 2, 2012: We restarted the second Cesium adsorption apparatus (Sarry). At 11:15 it reached its regular flow rate.

#### [Storage Facility]

·June 8, 2011 ~: Large tanks to store and keep treated or contaminated water have been transferred and installed sequentially.

# Accumulated water in vertical shafts of trenches and at basement level of building

| Unit   | Draining water source Place transferred  | Status   |
|--------|--|--|
| Unit 2 | · Unit 2T/B Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)] | · From 14:14 on February 7 to 8:47 on February 6 – transferring      |
| Unit 3 | · Unit 3T/B Central Radioactive Waste Treatment Facility [Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building)] | · From 9:49 on February 5 to 13:56 on February 7 - water transferred |
| Unit 6 | ·Unit 6T/B Temporary tanks   | ·From 10:00 – 16:00 on February 7 – no plan to transfer              |

| Place transferred   | Status of Water Level (As of 7:00 am on February 7)   |
|---|---|
| Process Main Building   | Water level: O.P.+ 3,070 mm(Accumulated total increase:4,287 mm), decreased 113mm since 7:00 am on February 6 |
| Miscellaneous Solid Waste<br>Volume Reduction Treatment<br>Building<br>(High Temperature Incinerator<br>Building) | Water level: O.P.+ 3,375mm(Accumulated total increase:4,101 mm), increased 4mm since 7:00 am on February 6    |

## Water level of the vertical shaft of the trench, T/B and R/B(As of 7:00 am on February 7)

|        | Vertical Shaft of Trench     | T/B                          | R/B                          |
|--------|------------------------------|------------------------------|------------------------------|
| Unit 1 | O.P. <+ 850 mm               | O.P.+ 2,878 mm               | O.P.+ 4,279 mm               |
|        | (No change since 7:00        | (17mm increase since 7:00 on | (23mm increase since 7:00 on |
|        | on February 6)               | February 6)                  | February 6)                  |
| Unit 2 | O.P.+ 3,116 mm               | O.P.+ 3,080 mm               | O.P.+ 3,247 mm               |
|        | (80mm increase since 7:00 on | (72mm increase since 7:00 on | (68mm increase since 7:00 on |
|        | February 6)                  | February 6)                  | February 6)                  |
| Unit 3 | O.P.+ 3,014 mm               | O.P.+ 2,923 mm               | O.P.+ 3,231 mm               |
|        | (10mm decrease since 7:00 on | (15mm decrease since 7:00 on | (15mm decrease since 7:00 on |
|        | February 6)                  | February 6)                  | February 6)                  |

| 11.20.4 |   | O.P.+ 2,940 mm              | O.P.+ 2,963 mm               |
|---------|---|-----------------------------|------------------------------|
| Unit 4  | - | (6mm decrease since 7:00 on | (10mm decrease since 7:00 on |
|         |   | February 6)                 | February 6)                  |

# <Monitoring of Radioactive Materials>

Nuclide Analysis of Seawater (Reference)

| Place of sampling                                   | Date of  | Time of  | ne of Ratio of density limit (times) |        |        |
|---|----------|----------|--------------------------------------|--------|--------|
| Flace of Sampling                                   | sampling | sampling | I-131                                | Cs-134 | Cs-137 |
| Approx. 30m north of Discharge Channel of 1F 5,6 u  | 2/6      | 8:30     | ND                                   | 0.08   | 0.06   |
| Approx. 330m south of Discharge Channel of 1F 1-4 u | 2/6      | 8:15     | ND                                   | 0.02   | 0.02   |
| Around 3,4 u Discharge Channel of 2F                | 2/6      | 8:25     | ND                                   | 0.02   | 0.02   |
| Approx. 7km south of Discharge Channel of 2F 1,2 u  | 2/6      | 8:05     | ND                                   | 0.02   | ND     |

All 3 major nuclides (I-131, Cs-134 and Cs-137) were ND at 3 points offshore Fukushima Prefecture (sampled on 2/5). and at 6 points offshore Miyagi Prefecture (sampled on 1/31).

## <Cooling of Spent Fuel Pools >(As of 11:00 am on February 7)

| Unit   | Cooling type               | Status of cooling | Temperature of water in Pool |
|--------|----------------------------|-------------------|------------------------------|
| Unit 1 | Circulating Cooling System | Under operation*1 | 22.0                         |
| Unit 2 | Circulating Cooling System | Under operation   | 14.2                         |
| Unit 3 | Circulating Cooling System | Under operation   | 24.8                         |
| Unit 4 | Circulating Cooling System | Under operation   | 25                           |

<sup>\*1:</sup> Air fin cooler of Secondary System out of service

## [Unit 2]

• A desalination equipment has been activated in order to reduce density of salt from the spent fuel pool since 11:50 on January 19.

## (Unit 3)

• A radioactive material removal equipment has been activated in order to remove radioactive materials from the spent fuel pool since 15:18 on January 14.

## <Water Injection to Pressure Containment Vessels > (As of 11:00 am on February 7)

| Unit   | Status of water injection   | Feed-water<br>nozzle<br>Temp. | Reactor pressure<br>vessel<br>Bottom temp. | Pressure of primary containment vessel |
|--------|---|-------------------------------|--|--|
| Unit 1 | Injecting freshwater<br>(Feed Water System: Approx. 4.3m³/h,<br>Core Spray System: Approx.1.9 m³/h) | 24.4                          | 24.8                                       | 104.8 kPaabs                           |
| Unit 2 | Injecting freshwater<br>(Feed Water System: Approx.6.5 m³/h,<br>Core Spray System: Approx.6.8 m³/h) | 43.4                          | 69.6                                       | 111 kPaabs                             |
| Unit 3 | Injecting freshwater<br>(Feed Water System: Approx.2.9 m³/h,<br>Core Spray System: Approx.5.8 m³/h) | 41.0                          | 50.0                                       | 101.6 kPaabs                           |

## - (Unit 2)

• From February 2, tendency of temperature rise at the bottom of PCV was observed. Thus, we increased the injuction amount into the reactor. After that, we have observed the tendency of the temperature, but the temperature have been

higher value (around 70.0 ). Thus, from 0:19 am to 3:20 am on February 7 we injected boric acid into the reactor as a safety countermeasures against the re-criticality, and changed the amount of the core spray system injection water from 3.7m³/h to 6.7m³/h\* at 4:24 am (the amount of the continuing feed water system injection is 6.8m³/h). Currently, the temperature is 69.6 (as of 11 am on February 7). We will monitor the progress continuously.

As a result of the sampling for the Gas Control System of the Unit 2 which we conducted on February 7 to make sure there is no re-criticality state, we confirmed that the concentration of Xe-135 was below the detectible limit  $(1.0 \times 10^{-1} \text{ Bg/cm}^3)$  at the system's entrance, meaning that it falls below the re-criticality criteria, or 1 Bg/cm<sup>3</sup>.

[Unit 4] [Unit 5] [Unit 6] No major change

#### <Others>

- October 7, 2011 ~: Continuously implementing water spray using water after purifying accumulated water of Unit 5 and Unit 6 to prevent spontaneous fire of trimmed trees and diffusion of dust.
- January 11, 2012 ~: As finding accumulated water including radioactive materials (December 18, 2011) at the trench
  between Process Main Building of Central Radioactive Waste Treatment Facility and Miscellaneous Solid Waste
  Volume Reduction Treatment Building (High Temperature Incinerator Building), we started inspection of the other
  trenches in the site. \*Please refer to the other reference materials for the result of daily inspection..