September 6, 2011

Tokyo Electric Power Company

**(Reference) Fukushima Daini NPS: Measurement result of reactor water and spent fuel pool water before and after the quake**

## ○Reactor water

<Unit> Iodine 131: [Bq/g] Cesium 134, 137：[Bq/cm$^3$]

| Nuclides / Unit | After the quake (data when stopped) | | | | Before the quake (data during operation) | | | |
|---|---|---|---|---|---|---|---|---|
| | Time of sample | Iodine 131 | Cesium 134 | Cesium 137 | Time of sample | Iodine 131 | Cesium 134 | Cesium 137 |
| Unit 1 | 3/14 8:30 | N.D. $<1.13\times10^{-1}$ | N.D. $<3.83\times10^{-1}$ | N.D. $<1.87\times10^{-1}$ | 3/8 9:25 | $2.00\times10^{-2}$ | N.D. $<1.93\times10^{-1}$ | N.D. $<6.72\times10^{-2}$ |
| Unit 2 | 5/15 9:55 | N.D. $<2.59\times10^{-2}$ ※1 | N.D. $<5.33\times10^{-2}$ ※1 | $1.82\times10^{-1}$ ※1 | 3/1 9:05 | $1.71\times10^{-2}$ | N.D. $<1.84\times10^{-1}$ | N.D. $<8.25\times10^{-2}$ |
| Unit 3 | 4/28 11:50 | N.D. $<5.04\times10^{-1}$ | N.D. $<8.59\times10^{-1}$ | N.D. $<8.07\times10^{-1}$ | 2/15 9:30 | $9.03\times10^{-3}$ | N.D. $<6.19\times10^{-2}$ | N.D. $<5.27\times10^{-2}$ |
| Unit 4 | 4/28 12:20 | N.D. $<4.00\times10^{-2}$※1 | N.D. $<7.49\times10^{-2}$※1 | N.D. $<6.38\times10^{-2}$※1 | 2/8 9:30 | $1.07\times10^{-2}$ | N.D. $<1.02\times10^{-1}$ | N.D. $<4.82\times10^{-2}$ |

## ○Spent fuel pool water

<Unit> Iodine 131: [Bq/g] Cesium 134, 137：[Bq/cm$^3$]

| Nuclides / Unit | After the quake (data when stopped) | | | | Before the quake (data during operation) | | | |
|---|---|---|---|---|---|---|---|---|
| | Time of sample | Iodine 131 | Cesium 134 | Cesium 137 | Time of sample | Iodine 131 | Cesium 134 | Cesium 137 |
| Unit 1 | 5/15 10:05 | N.D. $<3.33\times10^{-2}$ | N.D. $<9.36\times10^{-2}$ | $2.72\times10^{-2}$ ※3 | 3/2 10:15 | N.D. $<3.11\times10^{-3}$ | N.D. $<5.12\times10^{-3}$ | N.D. $<4.92\times10^{-3}$ |
| Unit 2 | 5/15 9:55 | N.D. $<2.59\times10^{-2}$ ※1 | N.D. $<5.33\times10^{-2}$ ※1 | $1.82\times10^{-1}$ ※1 | 3/2 9:30 | N.D. $<3.49\times10^{-3}$ | N.D. $<5.37\times10^{-3}$ | $4.10\times10^{-3}$ ※2 |
| Unit 3 | 5/15 11:05 | N.D. $<7.55\times10^{-3}$ | N.D. $<1.26\times10^{-2}$ | N.D. $<1.21\times10^{-2}$ | 3/2 9:45 | N.D. $<4.08\times10^{-3}$ | N.D. $<6.86\times10^{-3}$ | N.D. $<5.51\times10^{-3}$ |
| Unit 4 | 4/28 12:20 | N.D. $<4.00\times10^{-2}$※1 | N.D. $<7.49\times10^{-2}$※1 | N.D. $<6.38\times10^{-2}$※1 | 3/2 10:00 | N.D. $<2.71\times10^{-3}$ | N.D. $<1.54\times10^{-2}$ | N.D. $<3.99\times10^{-3}$ |

*1: At Unit 2 and Unit 4, as circulating cooling has been implemented by Residual Heat Removal System to cool reactor and spent fuel pool figure of reactor water and spent fuel pool water is the same.

*2: As Unit 2 spent fuel pool stores two fuel assemblies, which leaks were confirmed in 1997 and 2002*, Cesium 134 (half life: approx. 30years) has been detected before the quake. (* Announced on May 20, 1997 and November 18, 2002)

*3: At Unit 1 spent fuel pool (after the quake), Cesium 137 has been detected, however it has been confirmed from sampling and analysis on 22nd/28th July, that it is below the detection limit.

N.D. ：Below the detection limit