<Reference>
July 20, 2013
Tokyo Electric Power Company

Reference

# Nuclides Analysis Result of the Radioactive Materials in the Air at the Upper Part of Unit 3 Reactor Building <1/2>

(Data summarized on July 20)

| Place of Sampling | Upper Part of Unit 3 Reactor Building ①<br>(North side of a space above the reactor (Downward direction)) | | Upper Part of Unit 3 Reactor Building ②<br>(North side of a space above the reactor (Cross direction)) | | Upper Part of Unit 3 Reactor Building ③<br>(North side of a space above the reactor (Downward direction)) | | ② Density Limit Specified by the Reactor Regulation ($Bq/cm^3$)<br>(Density limit in the air which radiation workers breathe in is specified in section 4 of Appendix 2) |
|---|---|---|---|---|---|---|---|
| Time of Sampling | Jul 20, 2013<br>9:00 AM - 9:30 AM | | Jul 20, 2013<br>9:00 AM - 9:30 AM | | Jul 20, 2013<br>9:55 AM - 10:25 AM | | |
| Detected Nuclides<br>(Half-life) | ①Density of Sample ($Bq/cm^3$) | Scaling Factor (①/②) | ①Density of Sample ($Bq/cm^3$) | Scaling Factor (①/②) | ①Density of Sample ($Bq/cm^3$) | Scaling Factor (①/②) | |
| I-131<br>(Approx. 8 days) | ND | - | ND | - | ND | - | 1E-03 |
| Cs-134<br>(Approx. 2 years) | 9.3E-06 | 0.00 | 1.1E-05 | 0.01 | 1.4E-05 | 0.01 | 2E-03 |
| Cs-137<br>(Approx. 30 years) | 2.3E-05 | 0.01 | 2.3E-05 | 0.01 | 3.3E-05 | 0.01 | 3E-03 |

* The radioactivity density is the sum of the volatile nuclides density and the particulate nuclides density.

  O.OE－O is the same as O.O x $10^{-O}$

  Data of other nuclides is under examination.

* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

* "ND" indicates that the measurement result is below the detection limit.
  The detection limits are as follows.
  Volatile; I-131: Approx.1E-5Bq/$cm^3$, Cs-134: Approx. 1E-5Bq/$cm^3$, Cs-137: Approx: 2E-5Bq/$cm^3$
  Particulate; I-131: Approx. 4E-6Bq/$cm^3$
  As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limt are detected.

Reference

## Nuclides Analysis Result of the Radioactive Materials in the Air at the Upper Part of Unit 3 Reactor Building <2/2>

(Data summarized on July 20)

| Place of Sampling | Upper Part of Unit 3 Reactor Building ④ (North side of a space above the reactor (Cross direction)) | | Upper Part of Unit 3 Reactor Building ⑤ (Above the Reactor (Northeast Side)(Downward direction)) | | Upper Part of Unit 3 Reactor Building ⑥ (Above the Reactor (Northeast Side)(Cross direction)) | | ② Density Limit Specified by the Reactor Regulation ($Bq/cm^3$) (Density limit in the air which radiation workers breathe in is specified in section 4 of Appendix 2) |
|---|---|---|---|---|---|---|---|
| Time of Sampling | Jul 20, 2013 9:55 AM - 10:25 AM | | Jul 20, 2013 10:50 AM - 11:20 AM | | Jul 20, 2013 10:50 AM - 11:20 AM | | |
| Detected Nuclides (Half-life) | ①Density of Sample ($Bq/cm^3$) | Scaling Factor (①/②) | ①Density of Sample ($Bq/cm^3$) | Scaling Factor (①/②) | ①Density of Sample ($Bq/cm^3$) | Scaling Factor (①/②) | |
| I-131 (Approx. 8 days) | ND | - | ND | - | ND | - | 1E-03 |
| Cs-134 (Approx. 2 years) | 1.8E-05 | 0.01 | ND | - | ND | - | 2E-03 |
| Cs-137 (Approx. 30 years) | 2.9E-05 | 0.01 | ND | - | ND | - | 3E-03 |

* The radioactivity density is the sum of the volatile nuclides density and the particulate nuclides density.

O.OE－O is the same as O.O x $10^{-O}$

Data of other nuclides is under examination.

* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

* "ND" indicates that the measurement result is below the detection limit.
The detection limits are as follows.
Volatile; I-131: Approx.7E-6Bq/$cm^3$, Cs-134: Approx. 1E-5Bq/$cm^3$, Cs-137: Approx. 2E-5Bq/$cm^3$
Particulate; I-131: Approx.4E-6Bq/$cm^3$, Cs-134: Approx. 9E-6Bq/$cm^3$, Cs-137: Approx. 1E-5Bq/$cm^3$
As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limt are detected.