

## Exposure Dose Distribution

### 1. External Exposure Dose of Radiation Workers at the Fukushima Daiichi Nuclear Power Station

Table 1 shows what levels of external radiation exposure the workers who were involved in radiation work at the Fukushima Daiichi Nuclear Power Station from October 2014 to December 2014 received.

**Table 1**

| Dose Ranges (mSv) | October 2014      |             |       | November 2014     |             |       | December 2014     |             |       |
|-------------------|-------------------|-------------|-------|-------------------|-------------|-------|-------------------|-------------|-------|
|                   | TEPCO's Employees | Contractors | Total | TEPCO's Employees | Contractors | Total | TEPCO's Employees | Contractors | Total |
| Above 100         | 0                 | 0           | 0     | 0                 | 0           | 0     | 0                 | 0           | 0     |
| 75-100            | 0                 | 0           | 0     | 0                 | 0           | 0     | 0                 | 0           | 0     |
| 50-75             | 0                 | 0           | 0     | 0                 | 0           | 0     | 0                 | 0           | 0     |
| 20-50             | 0                 | 0           | 0     | 0                 | 0           | 0     | 0                 | 0           | 0     |
| 10-20             | 0                 | 18          | 18    | 0                 | 19          | 19    | 0                 | 21          | 21    |
| 5-10              | 0                 | 234         | 234   | 0                 | 269         | 269   | 0                 | 245         | 245   |
| 1-5               | 62                | 1766        | 1828  | 45                | 1644        | 1689  | 49                | 1870        | 1919  |
| 1 or less         | 1112              | 7935        | 9047  | 1141              | 8179        | 9320  | 982               | 7950        | 8932  |
| Total             | 1174              | 9953        | 11127 | 1186              | 10111       | 11297 | 1031              | 10086       | 11117 |
| Max. (mSv)        | 2.70              | 14.92       | 14.92 | 3.00              | 15.92       | 15.92 | 3.91              | 15.41       | 15.41 |
| Ave. (mSv)        | 0.29              | 0.80        | 0.75  | 0.21              | 0.78        | 0.72  | 0.23              | 0.80        | 0.75  |

• The values of the exposure dose and the number of the workers in the table above are subject to change, because there are times when APD data are replaced with monthly dose data measured by integral dosimeters. Or dose data of workers who wore only an integral dosimeter (ex., workers who entered only the Main Anti-earthquake Building) need to be updated in the table after the publication of the data.

### 2. External and Internal Exposure Doses of Radiation Workers at the Fukushima Daiichi Nuclear Power Station

Table 2 shows what levels of both external and internal radiation exposure the workers who were involved in radiation work at the Fukushima Daiichi Nuclear Power Station received during the two different periods of time, from March 11, 2011 to November 30, 2014 and from March 11, 2011 to December 31, 2014, comparing the figures of the two periods to indicate whether they increased, decreased or were the same. Table 3 lists data on the exposure doses of the workers engaged in radiation work in a similar way to Table 2. In Table 3, however, the data are those of April to November 2014 and those of April to December 2014, and the comparison of the figures of the data is made between those of the two periods just mentioned.

**Table 2**

| Dose Ranges (mSv) | March 2011 - November 2014 |             |        | March 2011 - December 2014 |             |        | Fluctuation       |             |       |
|-------------------|----------------------------|-------------|--------|----------------------------|-------------|--------|-------------------|-------------|-------|
|                   | TEPCO's Employees          | Contractors | Total  | TEPCO's Employees          | Contractors | Total  | TEPCO's Employees | Contractors | Total |
| Above 250         | 6                          | 0           | 6      | 6                          | 0           | 6      | 0                 | 0           | 0     |
| 200-250           | 1                          | 2           | 3      | 1                          | 2           | 3      | 0                 | 0           | 0     |
| 150-200           | 26                         | 2           | 28     | 26                         | 2           | 28     | 0                 | 0           | 0     |
| 100-150           | 117                        | 20          | 137    | 117                        | 20          | 137    | 0                 | 0           | 0     |
| 75-100            | 287                        | 169         | 456    | 290                        | 175         | 465    | 3                 | 6           | 9     |
| 50-75             | 325                        | 1220        | 1545   | 327                        | 1253        | 1580   | 2                 | 33          | 35    |
| 20-50             | 621                        | 5238        | 5859   | 618                        | 5342        | 5960   | -3                | 104         | 101   |
| 10-20             | 579                        | 4864        | 5443   | 581                        | 4958        | 5539   | 2                 | 94          | 96    |
| 5-10              | 483                        | 4587        | 5070   | 487                        | 4667        | 5154   | 4                 | 80          | 84    |
| 1-5               | 805                        | 8557        | 9362   | 807                        | 8734        | 9541   | 2                 | 177         | 179   |
| 1 or less         | 1113                       | 10922       | 12035  | 1132                       | 11024       | 12156  | 19                | 102         | 121   |
| Total             | 4363                       | 35581       | 39944  | 4392                       | 36177       | 40569  | 29                | 596         | 625   |
| Max. (mSv)        | 678.80                     | 238.42      | 678.80 | 678.80                     | 238.42      | 678.80 | -                 | -           | -     |
| Ave. (mSv)        | 23.21                      | 10.80       | 12.16  | 23.11                      | 10.85       | 12.17  | -                 | -           | -     |

- The values of the exposure dose and the number of the workers in the table above are subject to change, because there are times when APD data are replaced with monthly dose data measured by integral dosimeters. Or dose data of workers who wore only an integral dosimeter (ex., workers who entered only the Main Anti-earthquake Building) need to be updated in the table after the publication of the data.
- There has been no significant internal radiation exposure reported since October 2011.

**Table 3**

| Dose Ranges (mSv) | April 2014 - November 2014 |             |       | April 2014 - December 2014 |             |       | Fluctuation       |             |       |
|-------------------|----------------------------|-------------|-------|----------------------------|-------------|-------|-------------------|-------------|-------|
|                   | TEPCO's Employees          | Contractors | Total | TEPCO's Employees          | Contractors | Total | TEPCO's Employees | Contractors | Total |
| Above 100         | 0                          | 0           | 0     | 0                          | 0           | 0     | 0                 | 0           | 0     |
| 75-100            | 0                          | 0           | 0     | 0                          | 0           | 0     | 0                 | 0           | 0     |
| 50-75             | 0                          | 0           | 0     | 0                          | 0           | 0     | 0                 | 0           | 0     |
| 20-50             | 2                          | 484         | 486   | 5                          | 604         | 609   | 3                 | 120         | 123   |
| 10-20             | 16                         | 1438        | 1454  | 17                         | 1651        | 1668  | 1                 | 213         | 214   |
| 5-10              | 115                        | 2162        | 2277  | 130                        | 2340        | 2470  | 15                | 178         | 193   |
| 1-5               | 546                        | 4824        | 5370  | 573                        | 5015        | 5588  | 27                | 191         | 218   |
| 1 or less         | 905                        | 6875        | 7780  | 898                        | 6954        | 7852  | -7                | 79          | 72    |
| Total             | 1584                       | 15783       | 17367 | 1623                       | 16564       | 18187 | 39                | 781         | 820   |
| Max. (mSv)        | 23.25                      | 39.85       | 39.85 | 24.18                      | 39.85       | 39.85 | -                 | -           | -     |
| Ave. (mSv)        | 1.64                       | 3.97        | 3.76  | 1.74                       | 4.27        | 4.05  | -                 | -           | -     |

- The values of the exposure dose and the number of the workers in the table above are subject to change, because there are times when APD data are replaced with monthly dose data measured by integral dosimeters. Or dose data of workers who wore only an integral dosimeter (ex., workers who entered only the Main Anti-earthquake Building) need to be updated in the table after the publication of the data.

### 3. External and Internal Exposure Doses of “Workers Exposed to Especially High Radiation”

Table 4 shows what levels of both external and internal radiation exposure “workers exposed to especially high radiation”<sup>\*1</sup> received.<sup>\*2</sup>

**Table 4**

| Dose Ranges (mSv) | October 2014 | November 2014 | December 2014 | March 2011 - December 2014 |
|-------------------|--------------|---------------|---------------|----------------------------|
| Above 100         | 0            | 0             | 0             | 1                          |
| 75-100            | 0            | 0             | 0             | 178                        |
| 50-75             | 0            | 0             | 0             | 222                        |
| 20-50             | 0            | 0             | 0             | 250                        |
| 10-20             | 0            | 0             | 0             | 162                        |
| 5-10              | 0            | 0             | 0             | 126                        |
| 1-5               | 61           | 44            | 46            | 151                        |
| 1 or less         | 562          | 579           | 539           | 39                         |
| Total             | 623          | 623           | 585           | 1129                       |
| Max. (mSv)        | 2.70         | 3.00          | 3.91          | 102.69                     |
| Ave. (mSv)        | 0.41         | 0.31          | 0.30          | 36.57                      |

(The number of “workers exposed to particularly high radiation” in December was 631, and 46 among them did not work at the site.)

1. “Workers exposed to particularly high radiation” means workers who are involved in operations in which they could be exposed to the emergency dose limit (100mSv), which is stipulated in “Ordinance on Prevention of Ionizing Radiation Hazards, chapter 7.” In more detail, they are workers engaged in the work to maintain the function of the reactor facility or the cooling facility to cool down the spent fuel tank in the reactor facility, the steam turbine and its related facilities or the surrounding area where the radiation doses exceed 0.1mSv/h. Or they are workers who would engage in keeping running the function to control or prevent the release of a large number of radioactive materials should it be likely to occur due to malfunction or damage of the reactor facility.

So far workers who have worked as “workers exposed to especially high radiation” are all TEPCO’s employees.

2. To work as “workers exposed to particularly high radiation,” they applied each month as such. The figures in the cumulative data during the period from March 2011 to December 2014 in Table 4 above include the number of workers who used to be “workers exposed to particularly

high radiation” as well.

- The values of the exposure dose and the number of the workers in the table above are subject to change, because there are times when APD data are replaced with monthly dose data measured by integral dosimeters. Or the dose data of workers who wore only an integral dosimeter (ex., workers who entered only the Main Anti-earthquake Building) need to be updated in the table after the publication of the data.

- The figure shown in the dose range ,“above 100mSv,” in the cumulative data during the period from March 2011 to December 2014 is the one when the March 2011 data of the internal exposure dose were reexamined in July 2013.