

# Exposure Dose Distribution of the Workers at Fukushima Daiichi Nuclear Power Plant

(Updated on 30 Sep 2022)

## 1 Radiation Exposure Dose Distributions

(1) The distribution of external exposure dose of the workers during the last 3 months

(Numbers of workers who entered each area every month)

| Effective dose (E)<br>mSv | June-2022 |             |       | July-2022 |             |       | August-2022 |             |       |
|---------------------------|-----------|-------------|-------|-----------|-------------|-------|-------------|-------------|-------|
|                           | TEPCO     | Contractors | Total | TEPCO     | Contractors | Total | TEPCO       | Contractors | Total |
| 100<E                     | 0         | 0           | 0     | 0         | 0           | 0     | 0           | 0           | 0     |
| 75<E≤100                  | 0         | 0           | 0     | 0         | 0           | 0     | 0           | 0           | 0     |
| 50<E≤75                   | 0         | 0           | 0     | 0         | 0           | 0     | 0           | 0           | 0     |
| 20<E≤50                   | 0         | 0           | 0     | 0         | 0           | 0     | 0           | 0           | 0     |
| 10<E≤20                   | 0         | 0           | 0     | 0         | 0           | 0     | 0           | 0           | 0     |
| 5<E≤10                    | 0         | 14          | 14    | 0         | 18          | 18    | 0           | 7           | 7     |
| 1<E≤5                     | 29        | 612         | 641   | 15        | 495         | 510   | 11          | 359         | 370   |
| E≤1                       | 1045      | 5431        | 6476  | 992       | 5593        | 6585  | 1005        | 5673        | 6678  |
| Total                     | 1074      | 6057        | 7131  | 1007      | 6106        | 7113  | 1016        | 6039        | 7055  |
| Maximum (mSv)             | 2.27      | 7.40        | 7.40  | 4.37      | 10.00       | 10.00 | 1.49        | 6.35        | 6.35  |
| Average (mSv)             | 0.10      | 0.36        | 0.33  | 0.09      | 0.32        | 0.29  | 0.07        | 0.22        | 0.20  |

(\*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).

(2) Combined Cumulative Effective Dose from April 2021 (Internal and External)

| Effective dose (E)<br>mSv | April 2021 - July2022 |             |       | April 2021 - August2022 |             |       | Difference |             |       |
|---------------------------|-----------------------|-------------|-------|-------------------------|-------------|-------|------------|-------------|-------|
|                           | TEPCO                 | Contractors | Total | TEPCO                   | Contractors | Total | TEPCO      | Contractors | Total |
| 100<E                     | 0                     | 0           | 0     | 0                       | 0           | 0     | 0          | 0           | 0     |
| 75<E≤100                  | 0                     | 0           | 0     | 0                       | 0           | 0     | 0          | 0           | 0     |
| 50<E≤75                   | 0                     | 0           | 0     | 0                       | 0           | 0     | 0          | 0           | 0     |
| 20<E≤50                   | 0                     | 106         | 106   | 0                       | 128         | 128   | 0          | 22          | 22    |
| 10<E≤20                   | 28                    | 1058        | 1086  | 29                      | 1085        | 1114  | 1          | 27          | 28    |
| 5<E≤10                    | 72                    | 1011        | 1083  | 74                      | 1045        | 1119  | 2          | 34          | 36    |
| 1<E≤5                     | 250                   | 2344        | 2594  | 256                     | 2386        | 2642  | 6          | 42          | 48    |
| E≤1                       | 1130                  | 5403        | 6533  | 1140                    | 5488        | 6628  | 10         | 85          | 95    |
| Total                     | 1480                  | 9922        | 11402 | 1499                    | 10132       | 11631 | 19         | 210         | 229   |
| Maximum (mSv)             | 17.14                 | 25.93       | 25.93 | 18.01                   | 26.78       | 26.78 | -          | -           | -     |
| Average (mSv)             | 1.08                  | 3.16        | 2.89  | 1.11                    | 3.23        | 2.96  | -          | -           | -     |

(\*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).

(3) Combined Cumulative Effective Dose from April 2022

| Effective dose (E)<br>mSv | April 2022 - July 2022 |             |       | April 2022-August 2022 |             |       | Difference |             |       |
|---------------------------|------------------------|-------------|-------|------------------------|-------------|-------|------------|-------------|-------|
|                           | TEPCO                  | Contractors | Total | TEPCO                  | Contractors | Total | TEPCO      | Contractors | Total |
| 100<E                     | 0                      | 0           | 0     | 0                      | 0           | 0     | 0          | 0           | 0     |
| 75<E≤100                  | 0                      | 0           | 0     | 0                      | 0           | 0     | 0          | 0           | 0     |
| 50<E≤75                   | 0                      | 0           | 0     | 0                      | 0           | 0     | 0          | 0           | 0     |
| 20<E≤50                   | 0                      | 0           | 0     | 0                      | 0           | 0     | 0          | 0           | 0     |
| 10<E≤20                   | 0                      | 9           | 9     | 0                      | 19          | 19    | 0          | 10          | 10    |
| 5<E≤10                    | 3                      | 329         | 332   | 5                      | 436         | 441   | 2          | 107         | 109   |
| 1<E≤5                     | 129                    | 1481        | 1610  | 147                    | 1697        | 1844  | 18         | 216         | 234   |
| E≤1                       | 1133                   | 5543        | 6676  | 1142                   | 5513        | 6655  | 9          | -30         | -21   |
| Total                     | 1265                   | 7362        | 8627  | 1294                   | 7665        | 8959  | 29         | 303         | 332   |
| Maximum (mSv)             | 7.31                   | 12.21       | 12.21 | 7.77                   | 15.38       | 15.38 | -          | -           | -     |
| Average (mSv)             | 0.34                   | 0.96        | 0.87  | 0.39                   | 1.10        | 1.00  | -          | -           | -     |

(\*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).

(4) Distribution of sum of external exposure dose and internal exposure dose of workers engaged in specified high-dose work

(Specified high-dose work has not been performed since October 2015.)

| Effective dose (E)<br>mSv | March 2011 - September 2015 |
|---------------------------|-----------------------------|
| 100<E                     | 1                           |
| 75<E≤100                  | 191                         |
| 50<E≤75                   | 233                         |
| 20<E≤50                   | 267                         |
| 10<E≤20                   | 186                         |
| 5<E≤10                    | 129                         |
| 1<E≤5                     | 145                         |
| E≤1                       | 51                          |
| Total                     | 1203                        |
| Maximum (mSv)             | 102.69                      |
| Average (mSv)             | 36.49                       |

(As specified high-dose work has not been performed since October 2015, the table shows the data up to September 2015.)

(\*) Workers engaged in work to which dose limit (100 mSv) during emergency work is applied in line with Article 7 of the Ordinance on Prevention of Ionizing Radiation Hazards.

Specifically, these workers are those who are engaged in work to maintain the functions of a nuclear reactor facility or spent fuel storage pool, or in work to maintain functions to suppress or prevent the possible release of a large amount of radioactive materials due to a failure of or damage to the nuclear reactor facility at a location around the nuclear reactor facility, steam turbine, or accessory facility where hourly dose may exceed 0.1 mSv.

It should be noted that only TEPCO employees have so far been engaged in specified high-dose work.

(\*) The number of workers engaged in specified high-dose work is that of workers who were registered as such at

least once during the period between March 2011 and September 2015.

- (\*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).
- (\*) The results of re-evaluating committed doses in March 2011 reveal that maximum cumulative effective doses for the period between March 2011 and September 2015 exceeded 100.