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

(Updated on 31 May 2023)

- 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)	February-2023		March-2023			April-2023			
mSv	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100 <e< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<>	0	0	0	0	0	0	0	0	0
75 <e≤100< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤100<>	0	0	0	0	0	0	0	0	0
50 <e≤75< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤75<>	0	0	0	0	0	0	0	0	0
20 <e≤50< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤50<>	0	0	0	0	0	0	0	0	0
10 <e≤20< td=""><td>0</td><td>1</td><td>1</td><td>0</td><td>4</td><td>4</td><td>0</td><td>2</td><td>2</td></e≤20<>	0	1	1	0	4	4	0	2	2
5 <e≤10< td=""><td>0</td><td>29</td><td>29</td><td>0</td><td>39</td><td>39</td><td>0</td><td>89</td><td>89</td></e≤10<>	0	29	29	0	39	39	0	89	89
1 <e<u><5</e<u>	18	578	596	19	638	657	20	607	627
E≤1	1013	6044	7057	1062	6139	7201	1032	5789	6821
Total	1031	6652	7683	1081	6820	7901	1052	6487	7539
Maximum (mSv)	2.45	10.71	10.71	3.44	13.42	13.42	3.18	10.14	10.14
Average (mSv)	0.09	0.32	0.29	0.08	0.35	0.32	0.09	0.41	0.36

^(*) 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)	April 2021 - March 2023		April 2021 - April 2023			Difference			
mSv	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100 <e< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<>	0	0	0	0	0	0	0	0	0
75 <e≤100< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤100<>	0	0	0	0	0	0	0	0	0
50 <e≤75< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤75<>	0	0	0	0	0	0	0	0	0
20 <e≤50< td=""><td>4</td><td>451</td><td>455</td><td>4</td><td>529</td><td>533</td><td>0</td><td>78</td><td>78</td></e≤50<>	4	451	455	4	529	533	0	78	78
10 <e≤20< td=""><td>43</td><td>1380</td><td>1423</td><td>48</td><td>1393</td><td>1441</td><td>5</td><td>13</td><td>18</td></e≤20<>	43	1380	1423	48	1393	1441	5	13	18
5 <e≤10< td=""><td>92</td><td>1234</td><td>1326</td><td>95</td><td>1233</td><td>1328</td><td>3</td><td>-1</td><td>2</td></e≤10<>	92	1234	1326	95	1233	1328	3	-1	2
1 <e≤5< td=""><td>304</td><td>2445</td><td>2749</td><td>309</td><td>2461</td><td>2770</td><td>5</td><td>16</td><td>21</td></e≤5<>	304	2445	2749	309	2461	2770	5	16	21
E≤1	1127	6474	7601	1122	6609	7731	-5	135	130
Total	1570	11984	13554	1578	12225	13803	8	241	249
Maximum (mSv)	21.62	34.22	34.22	22.09	40.34	40.34	-	-	-
Average (mSv)	1.46	3.97	3.68	1.51	4.11	3.81	1	-	-

^(*) 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 2023

Effective dose (E)	April 2023					
mSv	TEPCO	Contractors	Total			
100 <e< td=""><td>0</td><td>0</td><td>0</td></e<>	0	0	0			
75 <e≤100< td=""><td>0</td><td>0</td><td>0</td></e≤100<>	0	0	0			
50 <e≤75< td=""><td>0</td><td>0</td><td>0</td></e≤75<>	0	0	0			
20 <e≤50< td=""><td>0</td><td>0</td><td>0</td></e≤50<>	0	0	0			
10 <e≤20< td=""><td>0</td><td>2</td><td>2</td></e≤20<>	0	2	2			
5 <e≤10< td=""><td>0</td><td>89</td><td>89</td></e≤10<>	0	89	89			
1 <e≤5< td=""><td>20</td><td>607</td><td>627</td></e≤5<>	20	607	627			
E≤1	1032	5789	6821			
Total	1052	6487	7539			
Maximum (mSv)	3.18	10.14	10.14			
Average (mSv)	0.09	0.41	0.36			

- (*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated dosesmeasured 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) mSv	March 2011 - September 2015			
100 <e< td=""><td>1</td></e<>	1			
75 <e≤100< td=""><td>191</td></e≤100<>	191			
50 <e≤75< td=""><td>233</td></e≤75<>	233			
20 <e≤50< td=""><td>267</td></e≤50<>	267			
10 <e≤20< td=""><td>186</td></e≤20<>	186			
5 <e≤10< td=""><td>129</td></e≤10<>	129			
1 <e≤5< td=""><td>145</td></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 Article7 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.