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

(Updated on 30 Jun 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)	March-2023			April-2023			May-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>4</td><td>4</td><td>0</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td></e≤20<>	0	4	4	0	1	1	0	0	0
5 <e≤10< td=""><td>0</td><td>39</td><td>39</td><td>0</td><td>76</td><td>76</td><td>0</td><td>42</td><td>42</td></e≤10<>	0	39	39	0	76	76	0	42	42
1 <e<u><5</e<u>	19	638	657	18	613	631	9	454	463
E≤1	1062	6139	7201	1034	5797	6831	1019	5961	6980
Total	1081	6820	7901	1052	6487	7539	1028	6457	7485
Maximum (mSv)	3.44	13.42	13.42	3.10	10.10	10.10	3.13	9.89	9.89
Average (mSv)	0.08	0.35	0.32	0.09	0.41	0.36	0.06	0.28	0.25

^(*) 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 - April 2023			April 2021 - May 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>529</td><td>533</td><td>6</td><td>580</td><td>586</td><td>2</td><td>51</td><td>53</td></e≤50<>	4	529	533	6	580	586	2	51	53
10 <e≤20< td=""><td>48</td><td>1392</td><td>1440</td><td>48</td><td>1399</td><td>1447</td><td>0</td><td>7</td><td>7</td></e≤20<>	48	1392	1440	48	1399	1447	0	7	7
5 <e≤10< td=""><td>96</td><td>1229</td><td>1325</td><td>98</td><td>1258</td><td>1356</td><td>2</td><td>29</td><td>31</td></e≤10<>	96	1229	1325	98	1258	1356	2	29	31
1 <e≤5< td=""><td>307</td><td>2456</td><td>2763</td><td>311</td><td>2439</td><td>2750</td><td>4</td><td>-17</td><td>-13</td></e≤5<>	307	2456	2763	311	2439	2750	4	-17	-13
E≤1	1123	6619	7742	1126	6772	7898	3	153	156
Total	1578	12225	13803	1589	12448	14037	11	223	234
Maximum (mSv)	22.12	39.92	39.92	23.64	43.09	43.09	-	-	-
Average (mSv)	1.51	4.11	3.81	1.54	4.18	3.88	-	-	-

^(*) 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			April 2023 - May 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>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>23</td><td>23</td><td>0</td><td>22</td><td>22</td></e≤20<>	0	1	1	0	23	23	0	22	22
5 <e≤10< td=""><td>0</td><td>76</td><td>76</td><td>0</td><td>184</td><td>184</td><td>0</td><td>108</td><td>108</td></e≤10<>	0	76	76	0	184	184	0	108	108
1 <e<u>≤5</e<u>	18	613	631	39	899	938	21	286	307
E≤1	1034	5797	6831	1094	6061	7155	60	264	324
Total	1052	6487	7539	1133	7167	8300	81	680	761
Maximum (mSv)	3.10	10.10	10.10	3.63	14.89	14.89	-	-	-
Average (mSv)	0.09	0.41	0.36	0.13	0.62	0.56	-	-	-

- (*) 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.