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

(Updated on 30 Nov 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)	August-2022			September-2022			October-2022		
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>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤20<>	0	0	0	0	0	0	0	0	0
5 <e≤10< td=""><td>0</td><td>8</td><td>8</td><td>0</td><td>30</td><td>30</td><td>0</td><td>36</td><td>36</td></e≤10<>	0	8	8	0	30	30	0	36	36
1 <e≤5< td=""><td>11</td><td>354</td><td>365</td><td>9</td><td>528</td><td>537</td><td>22</td><td>510</td><td>532</td></e≤5<>	11	354	365	9	528	537	22	510	532
E≤1	1013	5677	6690	1081	5763	6844	1011	5935	6946
Total	1024	6039	7063	1090	6321	7411	1033	6481	7514
Maximum (mSv)	1.49	6.35	6.35	4.60	7.10	7.10	3.79	9.45	9.45
Average (mSv)	0.07	0.23	0.21	0.08	0.34	0.30	0.10	0.30	0.27

^(*) 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 - September 2022			April 2021 - October 2022			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>181</td><td>181</td><td>2</td><td>215</td><td>217</td><td>2</td><td>34</td><td>36</td></e≤50<>	0	181	181	2	215	217	2	34	36
10 <e≤20< td=""><td>33</td><td>1117</td><td>1150</td><td>35</td><td>1157</td><td>1192</td><td>2</td><td>40</td><td>42</td></e≤20<>	33	1117	1150	35	1157	1192	2	40	42
5 <e≤10< td=""><td>75</td><td>1080</td><td>1155</td><td>75</td><td>1146</td><td>1221</td><td>0</td><td>66</td><td>66</td></e≤10<>	75	1080	1155	75	1146	1221	0	66	66
1 <e≤5< td=""><td>265</td><td>2429</td><td>2694</td><td>276</td><td>2404</td><td>2680</td><td>11</td><td>-25</td><td>-14</td></e≤5<>	265	2429	2694	276	2404	2680	11	-25	-14
E≤1	1146	5626	6772	1140	5882	7022	-6	256	250
Total	1519	10433	11952	1528	10804	12332	9	371	380
Maximum (mSv)	18.31	29.68	29.68	20.41	32.27	32.27	-	-	-
Average (mSv)	1.16	3.35	3.07	1.22	3.41	3.14	-	-	-

^(*) 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)	April 2022-September 2022			April 2022-October 2022			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>83</td><td>83</td><td>3</td><td>142</td><td>145</td><td>3</td><td>59</td><td>62</td></e≤20<>	0	83	83	3	142	145	3	59	62
5 <e≤10< td=""><td>11</td><td>595</td><td>606</td><td>16</td><td>725</td><td>741</td><td>5</td><td>130</td><td>135</td></e≤10<>	11	595	606	16	725	741	5	130	135
1 <e≤5< td=""><td>160</td><td>1824</td><td>1984</td><td>171</td><td>1928</td><td>2099</td><td>11</td><td>104</td><td>115</td></e≤5<>	160	1824	1984	171	1928	2099	11	104	115
E≤1	1157	5562	6719	1153	5716	6869	-4	154	150
Total	1328	8064	9392	1343	8511	9854	15	447	462
Maximum (mSv)	8.27	16.50	16.50	10.50	17.60	17.60	-	-	-
Average (mSv)	0.45	1.32	1.19	0.52	1.48	1.35	-	-	-

- (*) 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.