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

(Updated on 26 Dec 2022)

1 Radiation Exposure Dose Distributions

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

Effective dose (E)	September-2022			October-2022			November-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>1</td><td>1</td></e≤20<>	0	0	0	0	0	0	0	1	1
5 <e≤10< td=""><td>0</td><td>30</td><td>30</td><td>0</td><td>35</td><td>35</td><td>0</td><td>34</td><td>34</td></e≤10<>	0	30	30	0	35	35	0	34	34
1 <e≤5< td=""><td>9</td><td>528</td><td>537</td><td>22</td><td>514</td><td>536</td><td>14</td><td>593</td><td>607</td></e≤5<>	9	528	537	22	514	536	14	593	607
E≤1	1081	5763	6844	1020	5932	6952	1040	6083	7123
Total	1090	6321	7411	1042	6481	7523	1054	6711	7765
Maximum (mSv)	4.60	7.10	7.10	3.79	9.39	9.39	2.44	11.76	11.76
Average (mSv)	0.08	0.34	0.30	0.10	0.31	0.28	0.09	0.34	0.30

(*) 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).

Effective dose (E)	April 2021 - October 2022			April 2021 - November 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>2</td><td>213</td><td>215</td><td>2</td><td>254</td><td>256</td><td>0</td><td>41</td><td>41</td></e≤50<>	2	213	215	2	254	256	0	41	41
10 <e≤20< td=""><td>35</td><td>1168</td><td>1203</td><td>36</td><td>1221</td><td>1257</td><td>1</td><td>53</td><td>54</td></e≤20<>	35	1168	1203	36	1221	1257	1	53	54
5 <e≤10< td=""><td>75</td><td>1136</td><td>1211</td><td>81</td><td>1163</td><td>1244</td><td>6</td><td>27</td><td>33</td></e≤10<>	75	1136	1211	81	1163	1244	6	27	33
1 <e≤5< td=""><td>279</td><td>2407</td><td>2686</td><td>285</td><td>2412</td><td>2697</td><td>6</td><td>5</td><td>11</td></e≤5<>	279	2407	2686	285	2412	2697	6	5	11
E≤1	1137	5880	7017	1135	6025	7160	-2	145	143
Total	1528	10804	12332	1539	11075	12614	11	271	282
Maximum (mSv)	20.41	32.27	32.27	21.06	32.82	32.82	-	-	-
Average (mSv)	1.22	3.42	3.15	1.27	3.54	3.26	-	-	-

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

(*) 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).

Effective dose (E)	April 2022-October 2022			April 2022-November 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>3</td><td>141</td><td>144</td><td>4</td><td>242</td><td>246</td><td>1</td><td>101</td><td>102</td></e≤20<>	3	141	144	4	242	246	1	101	102
5 <e≤10< td=""><td>16</td><td>729</td><td>745</td><td>20</td><td>819</td><td>839</td><td>4</td><td>90</td><td>94</td></e≤10<>	16	729	745	20	819	839	4	90	94
1 <e≤5< td=""><td>174</td><td>1925</td><td>2099</td><td>193</td><td>2009</td><td>2202</td><td>19</td><td>84</td><td>103</td></e≤5<>	174	1925	2099	193	2009	2202	19	84	103
E≤1	1150	5716	6866	1148	5769	6917	-2	53	51
Total	1343	8511	9854	1365	8839	10204	22	328	350
Maximum (mSv)	10.50	17.60	17.60	11.52	17.60	17.60	-	-	-
Average (mSv)	0.52	1.49	1.35	0.58	1.69	1.54	-	-	-

(3) Combined Cumulative Effective Dose from April 2022

(*) 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

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			

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

(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.