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

(Updated on 29 Mar 2024)

- 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)	December-2023			January-2024			February-2024		
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>2</td><td>2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>3</td><td>3</td></e≤20<>	0	2	2	0	0	0	0	3	3
5 <e≤10< td=""><td>0</td><td>61</td><td>61</td><td>0</td><td>18</td><td>18</td><td>0</td><td>40</td><td>40</td></e≤10<>	0	61	61	0	18	18	0	40	40
1 <e<u><5</e<u>	17	522	539	9	380	389	8	489	497
E≤1	1037	6378	7415	984	6457	7441	1036	6434	7470
Total	1054	6963	8017	993	6855	7848	1044	6966	8010
Maximum (mSv)	3.70	10.20	10.20	1.90	8.00	8.00	1.89	12.14	12.14
Average (mSv)	0.08	0.33	0.29	0.06	0.24	0.22	0.07	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 - January 2024			April 2021 - February 2024			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>1</td><td>1</td><td>0</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td></e≤75<>	0	1	1	0	1	1	0	0	0
20 <e≤50< td=""><td>21</td><td>922</td><td>943</td><td>21</td><td>955</td><td>976</td><td>0</td><td>33</td><td>33</td></e≤50<>	21	922	943	21	955	976	0	33	33
10 <e≤20< td=""><td>49</td><td>1593</td><td>1642</td><td>55</td><td>1652</td><td>1707</td><td>6</td><td>59</td><td>65</td></e≤20<>	49	1593	1642	55	1652	1707	6	59	65
5 <e≤10< td=""><td>102</td><td>1544</td><td>1646</td><td>98</td><td>1573</td><td>1671</td><td>-4</td><td>29</td><td>25</td></e≤10<>	102	1544	1646	98	1573	1671	-4	29	25
1 <e≤5< td=""><td>347</td><td>2630</td><td>2977</td><td>355</td><td>2647</td><td>3002</td><td>8</td><td>17</td><td>25</td></e≤5<>	347	2630	2977	355	2647	3002	8	17	25
E≤1	1228	7628	8856	1220	7715	8935	-8	87	79
Total	1747	14318	16065	1749	14543	16292	2	225	227
Maximum (mSv)	30.32	50.62	50.62	30.54	50.62	50.62	-	-	-
Average (mSv)	1.71	4.80	4.47	1.74	4.87	4.54	-	-	-

^(*) 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 - January 2024			April 2023 - February 2024			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>2</td><td>602</td><td>604</td><td>3</td><td>716</td><td>719</td><td>1</td><td>114</td><td>115</td></e≤20<>	2	602	604	3	716	719	1	114	115
5 <e≤10< td=""><td>24</td><td>1026</td><td>1050</td><td>25</td><td>1100</td><td>1125</td><td>1</td><td>74</td><td>75</td></e≤10<>	24	1026	1050	25	1100	1125	1	74	75
1 <e≤5< td=""><td>153</td><td>1940</td><td>2093</td><td>166</td><td>2085</td><td>2251</td><td>13</td><td>145</td><td>158</td></e≤5<>	153	1940	2093	166	2085	2251	13	145	158
E≤1	1213	6448	7661	1208	6384	7592	-5	-64	-69
Total	1392	10016	11408	1402	10285	11687	10	269	279
Maximum (mSv)	10.60	16.70	16.70	11.69	16.82	16.82	-	-	-
Average (mSv)	0.50	2.12	1.92	0.54	2.26	2.05	-	-	-

- (*) 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.