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

(Updated on 28 Feb 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)	1
<u>۱</u>								2		

Effective dose (E)	November-2022			D	ecember-2022	2	January-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>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤20<>	0	1	1	0	0	0	0	0	0
5 <e≤10< td=""><td>0</td><td>34</td><td>34</td><td>0</td><td>32</td><td>32</td><td>0</td><td>14</td><td>14</td></e≤10<>	0	34	34	0	32	32	0	14	14
1 <e≤5< td=""><td>14</td><td>585</td><td>599</td><td>16</td><td>501</td><td>517</td><td>10</td><td>448</td><td>458</td></e≤5<>	14	585	599	16	501	517	10	448	458
E≤1	1040	6091	7131	1031	6169	7200	1010	6125	7135
Total	1054	6711	7765	1047	6702	7749	1020	6587	7607
Maximum (mSv)	2.44	11.76	11.76	2.03	9.91	9.91	2.67	8.82	8.82
Average (mSv)	0.09	0.35	0.32	0.09	0.30	0.27	0.06	0.25	0.23

(*) 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 - December 2022			April 2	021 - Januar	y 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>2</td><td>296</td><td>298</td><td>2</td><td>323</td><td>325</td><td>0</td><td>27</td><td>27</td></e≤50<>	2	296	298	2	323	325	0	27	27
10 <e≤20< td=""><td>38</td><td>1267</td><td>1305</td><td>40</td><td>1312</td><td>1352</td><td>2</td><td>45</td><td>47</td></e≤20<>	38	1267	1305	40	1312	1352	2	45	47
5 <e≤10< td=""><td>87</td><td>1187</td><td>1274</td><td>86</td><td>1204</td><td>1290</td><td>-1</td><td>17</td><td>16</td></e≤10<>	87	1187	1274	86	1204	1290	-1	17	16
1 <e≤5< td=""><td>288</td><td>2420</td><td>2708</td><td>295</td><td>2435</td><td>2730</td><td>7</td><td>15</td><td>22</td></e≤5<>	288	2420	2708	295	2435	2730	7	15	22
E≤1	1132	6143	7275	1132	6260	7392	0	117	117
Total	1547	11313	12860	1555	11534	13089	8	221	229
Maximum (mSv)	21.12	32.86	32.86	21.17	33.09	33.09	-	-	-
Average (mSv)	1.32	3.65	3.37	1.36	3.73	3.44	-	-	-

(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 - December 2022			April 2	022 - Januar	y 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>4</td><td>331</td><td>335</td><td>4</td><td>414</td><td>418</td><td>0</td><td>83</td><td>83</td></e≤20<>	4	331	335	4	414	418	0	83	83
5 <e≤10< td=""><td>31</td><td>900</td><td>931</td><td>36</td><td>965</td><td>1001</td><td>5</td><td>65</td><td>70</td></e≤10<>	31	900	931	36	965	1001	5	65	70
1 <e≤5< td=""><td>202</td><td>2071</td><td>2273</td><td>208</td><td>2124</td><td>2332</td><td>6</td><td>53</td><td>59</td></e≤5<>	202	2071	2273	208	2124	2332	6	53	59
E≤1	1142	5816	6958	1143	5876	7019	1	60	61
Total	1379	9118	10497	1391	9379	10770	12	261	273
Maximum (mSv)	11.74	17.60	17.60	11.77	17.60	17.60	_	-	-
Average (mSv)	0.64	1.86	1.70	0.68	1.99	1.82	_	-	-

(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.