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

(Updated on 31 Oct 2023)

1 Radiation Exposure Dose Distributions

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

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Effective dose (E)	July-2023			August-2023			September-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>(</td></e≤50<>	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>2</td><td>2</td></e≤20<>	0	0	0	0	0	0	0	2	2
5 <e≤10< td=""><td>0</td><td>21</td><td>21</td><td>0</td><td>12</td><td>12</td><td>0</td><td>37</td><td>37</td></e≤10<>	0	21	21	0	12	12	0	37	37
1 <e≤5< td=""><td>2</td><td>580</td><td>582</td><td>4</td><td>326</td><td>330</td><td>11</td><td>521</td><td>532</td></e≤5<>	2	580	582	4	326	330	11	521	532
E≤1	996	6020	7016	1029	6045	7074	1045	6084	7129
Total	998	6621	7619	1033	6383	7416	1056	6644	7700
Maximum (mSv)	2.30	7.60	7.60	2.60	7.60	7.60	2.99	10.54	10.54
Average (mSv)	0.06	0.31	0.28	0.05	0.21	0.19	0.06	0.30	0.27

(Numbers of workers who entered each area every month)

(*) 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 - August 2023			April 2021 - September 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>11</td><td>716</td><td>727</td><td>13</td><td>756</td><td>769</td><td>2</td><td>40</td><td>42</td></e≤50<>	11	716	727	13	756	769	2	40	42
10 <e≤20< td=""><td>49</td><td>1429</td><td>1478</td><td>49</td><td>1442</td><td>1491</td><td>0</td><td>13</td><td>13</td></e≤20<>	49	1429	1478	49	1442	1491	0	13	13
5 <e≤10< td=""><td>103</td><td>1321</td><td>1424</td><td>102</td><td>1382</td><td>1484</td><td>-1</td><td>61</td><td>60</td></e≤10<>	103	1321	1424	102	1382	1484	-1	61	60
1 <e≤5< td=""><td>315</td><td>2566</td><td>2881</td><td>328</td><td>2568</td><td>2896</td><td>13</td><td>2</td><td>15</td></e≤5<>	315	2566	2881	328	2568	2896	13	2	15
E≤1	1223	7085	8308	1228	7211	8439	5	126	131
Total	1701	13117	14818	1720	13359	15079	19	242	261
Maximum (mSv)	24.11	46.62	46.62	24.91	47.44	47.44	-	-	-
Average (mSv)	1.53	4.42	4.09	1.56	4.49	4.15	-	-	-

(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 2023 - August 2023			April 2023 - September 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>158</td><td>158</td><td>0</td><td>234</td><td>234</td><td>0</td><td>76</td><td>76</td></e≤20<>	0	158	158	0	234	234	0	76	76
5 <e≤10< td=""><td>2</td><td>548</td><td>550</td><td>4</td><td>650</td><td>654</td><td>2</td><td>102</td><td>104</td></e≤10<>	2	548	550	4	650	654	2	102	104
1 <e≤5< td=""><td>83</td><td>1401</td><td>1484</td><td>109</td><td>1578</td><td>1687</td><td>26</td><td>177</td><td>203</td></e≤5<>	83	1401	1484	109	1578	1687	26	177	203
E≤1	1236	6226	7462	1239	6234	7473	3	8	11
Total	1321	8333	9654	1352	8696	10048	31	363	394
Maximum (mSv)	6.30	16.20	16.20	6.99	16.20	16.20	-	-	-
Average (mSv)	0.24	1.24	1.10	0.29	1.42	1.27	-	-	-

(3) Combined Cumulative Effective Dose from April 2023

(*) 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.