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

(Updated on 29 May 2020)

1 Radiation Exposure Dose Distributions

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

(Numbers of worl	kers who	entered ea	ich area	every mo	onth)				
Effective dose (E)	February 2020			March 2020			April 2020		
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>10</td><td>10</td><td>0</td><td>4</td><td>4</td><td>0</td><td>0</td><td>0</td></e≤20<>	0	10	10	0	4	4	0	0	0
5 <e≤10< td=""><td>0</td><td>61</td><td>61</td><td>0</td><td>46</td><td>46</td><td>0</td><td>29</td><td>29</td></e≤10<>	0	61	61	0	46	46	0	29	29
1 <e≤5< td=""><td>15</td><td>740</td><td>755</td><td>17</td><td>765</td><td>782</td><td>18</td><td>598</td><td>616</td></e≤5<>	15	740	755	17	765	782	18	598	616
E≤1	918	5208	6126	900	5252	6152	807	4726	5533
Total	933	6019	6952	917	6067	6984	825	5353	6178
Maximum (mSv)	2.96	11.07	11.07	1.86	14.30	14.30	3.37	9.73	9.73
Average (mSv)	0.11	0.49	0.44	0.12	0.47	0.42	0.11	0.37	0.34

(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).

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Effective dose (E)	April 2016 - March 2020			April	April 2016 – April 2020			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>13</td><td>13</td><td>0</td><td>18</td><td>18</td><td>0</td><td>5</td><td>5</td></e≤100<>	0	13	13	0	18	18	0	5	5	
50 <e≤75< td=""><td>0</td><td>222</td><td>222</td><td>0</td><td>236</td><td>236</td><td>0</td><td>14</td><td>14</td></e≤75<>	0	222	222	0	236	236	0	14	14	
20 <e≤50< td=""><td>67</td><td>1743</td><td>1810</td><td>68</td><td>1772</td><td>1840</td><td>1</td><td>29</td><td>30</td></e≤50<>	67	1743	1810	68	1772	1840	1	29	30	
10 <e≤20< td=""><td>140</td><td>2320</td><td>2460</td><td>144</td><td>2315</td><td>2459</td><td>4</td><td>-5</td><td>-1</td></e≤20<>	140	2320	2460	144	2315	2459	4	-5	-1	
5 <e≤10< td=""><td>182</td><td>2375</td><td>2557</td><td>185</td><td>2375</td><td>2560</td><td>3</td><td>0</td><td>3</td></e≤10<>	182	2375	2557	185	2375	2560	3	0	3	
1 <e≤5< td=""><td>594</td><td>4550</td><td>5144</td><td>594</td><td>4571</td><td>5165</td><td>0</td><td>21</td><td>21</td></e≤5<>	594	4550	5144	594	4571	5165	0	21	21	
E≤1	1299	9445	10744	1294	9519	10813	-5	74	69	
Total	2282	20668	22950	2285	20806	23091	3	138	141	
Maximum (mSv)	46.61	79.90	79.90	46.82	80.22	80.22	-	-	-	
Average (mSv)	2.96	6.36	6.02	2.99	6.42	6.08	-	-	-	

(*) 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 2019	(Internal and External)
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Effective dose (E)		April 2020	
mSv	TEPCO	Contractors	Total
100 <e< td=""><td>0</td><td>0</td><td>0</td></e<>	0	0	0
75 <e≤100< td=""><td>0</td><td>0</td><td>0</td></e≤100<>	0	0	0
50 <e≤75< td=""><td>0</td><td>0</td><td>0</td></e≤75<>	0	0	0
20 <e≤50< td=""><td>0</td><td>0</td><td>0</td></e≤50<>	0	0	0
10 <e≤20< td=""><td>0</td><td>0</td><td>0</td></e≤20<>	0	0	0
5 <e≤10< td=""><td>0</td><td>29</td><td>29</td></e≤10<>	0	29	29

1 <e≤5< td=""><td>18</td><td>598</td><td>616</td></e≤5<>	18	598	616
E≤1	807	4726	5533
Total	825	5353	6178
Maximum (mSv)	3.37	9.73	9.73
Average (mSv)	0.11	0.37	0.34

^(*) 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).

(4) Distribution of sum of external exposure dose and internal exposure dose of workers engaged in

specified high-dose work

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Effective dose (E)	March 2011 - September 2015
mSv	1
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 Article 7 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.