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

(Updated on 31 August 2020)

## 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)	May 2020			June 2020			July 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>(</td></e<>	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>(</td></e≤100<>	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>(</td></e≤75<>	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>0</td><td>(</td></e≤20<>	0	0	0	0	0	0	0	0	(
5 <e≤10< td=""><td>0</td><td>25</td><td>25</td><td>0</td><td>52</td><td>52</td><td>0</td><td>46</td><td>46</td></e≤10<>	0	25	25	0	52	52	0	46	46
1 <e≤5< td=""><td>9</td><td>561</td><td>570</td><td>18</td><td>692</td><td>710</td><td>15</td><td>683</td><td>698</td></e≤5<>	9	561	570	18	692	710	15	683	698
E≤1	773	4762	5535	929	4920	5849	958	4948	5906
Total	782	5348	6130	947	5664	6611	973	5677	6650
Maximum (mSv)	1.81	8.80	8.80	3.00	9.30	9.30	2.90	8.17	8.17
Average (mSv)	0.09	0.38	0.34	0.13	0.46	0.41	0.11	0.41	0.36

(\*) 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 2016 - June 2020			April 2016 - July 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>23</td><td>23</td><td>0</td><td>25</td><td>25</td><td>0</td><td>2</td><td>2</td></e≤100<>	0	23	23	0	25	25	0	2	2
50 <e≤75< td=""><td>0</td><td>255</td><td>255</td><td>0</td><td>270</td><td>270</td><td>0</td><td>15</td><td>15</td></e≤75<>	0	255	255	0	270	270	0	15	15
20 <e≤50< td=""><td>72</td><td>1839</td><td>1911</td><td>73</td><td>1861</td><td>1934</td><td>1</td><td>22</td><td>23</td></e≤50<>	72	1839	1911	73	1861	1934	1	22	23
10 <e≤20< td=""><td>141</td><td>2313</td><td>2454</td><td>144</td><td>2333</td><td>2477</td><td>3</td><td>20</td><td>23</td></e≤20<>	141	2313	2454	144	2333	2477	3	20	23
5 <e≤10< td=""><td>192</td><td>2454</td><td>2646</td><td>192</td><td>2447</td><td>2639</td><td>0</td><td>-7</td><td>-7</td></e≤10<>	192	2454	2646	192	2447	2639	0	-7	-7
1 <e≤5< td=""><td>596</td><td>4587</td><td>5183</td><td>595</td><td>4619</td><td>5214</td><td>-1</td><td>32</td><td>31</td></e≤5<>	596	4587	5183	595	4619	5214	-1	32	31
E≤1	1338	9699	11037	1349	9767	11116	11	68	79
Total	2339	21170	23509	2353	21322	23675	14	152	166
Maximum (mSv)	48.64	82.70	82.70	48.84	85.26	85.26	-	-	-
Average (mSv)	3.00	6.53	6.17	3.03	6.59	6.23	-	-	-

## (2) Combined Cumulative Effective Dose from April 2016 (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 2020 - June 2020			April 2020 - July 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>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>33</td><td>33</td><td>0</td><td>99</td><td>99</td><td>0</td><td>66</td><td>66</td></e≤20<>	0	33	33	0	99	99	0	66	66
5 <e≤10< td=""><td>0</td><td>370</td><td>370</td><td>5</td><td>520</td><td>525</td><td>5</td><td>150</td><td>155</td></e≤10<>	0	370	370	5	520	525	5	150	155
1 <e≤5< td=""><td>88</td><td>1061</td><td>1149</td><td>117</td><td>1248</td><td>1365</td><td>29</td><td>187</td><td>216</td></e≤5<>	88	1061	1149	117	1248	1365	29	187	216
E≤1	937	4939	5876	968	4935	5903	31	-4	27
Total	1025	6403	7428	1090	6802	7892	65	399	464
Maximum (mSv)	4.96	17.20	17.20	6.78	17.28	17.28	-	-	-
Average (mSv)	0.27	1.04	0.93	0.35	1.32	1.19	-	-	-

(3) Combined Cumulative Effective Dose from April 2020 (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).

(4) Distribution of sum of external exposure dose and internal exposure dose of workers engaged in specified high-dose work

1				
March 2011 - September 2015				
-				
1				
191				
233				
267				
186				
129				
145				
51				
1203				
102.69				
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.