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

(Updated on 29 October 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)

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Effective dose (E)	July 2020			August 2020			September 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>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td></e≤20<>	0	0	0	0	0	0	0	1	1
5 <e≤10< td=""><td>0</td><td>51</td><td>51</td><td>0</td><td>4</td><td>4</td><td>0</td><td>32</td><td>32</td></e≤10<>	0	51	51	0	4	4	0	32	32
1 <e≤5< td=""><td>15</td><td>661</td><td>676</td><td>5</td><td>407</td><td>412</td><td>13</td><td>513</td><td>526</td></e≤5<>	15	661	676	5	407	412	13	513	526
E≤1	997	4967	5964	951	4969	5920	978	4981	5959
Total	1012	5679	6691	956	5380	6336	991	5527	6518
M aximum (mSv)	2.90	8.42	8.42	1.44	5.40	5.40	2.66	10.43	10.43
Average (mSv)	0.10	0.42	0.38	0.08	0.26	0.24	0.11	0.33	0.30

<sup>(\*)</sup> 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 2016 (Internal and External)

Effective dose (E)	April 2016 - August 2020			April 2016 - September 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>26</td><td>26</td><td>0</td><td>34</td><td>34</td><td>0</td><td>8</td><td>8</td></e≤100<>	0	26	26	0	34	34	0	8	8
50 <e≤75< td=""><td>0</td><td>279</td><td>279</td><td>0</td><td>287</td><td>287</td><td>0</td><td>8</td><td>8</td></e≤75<>	0	279	279	0	287	287	0	8	8
20 <e≤50< td=""><td>75</td><td>1889</td><td>1964</td><td>79</td><td>1909</td><td>1988</td><td>4</td><td>20</td><td>24</td></e≤50<>	75	1889	1964	79	1909	1988	4	20	24
10 <e≤20< td=""><td>147</td><td>2339</td><td>2486</td><td>146</td><td>2341</td><td>2487</td><td>-1</td><td>2</td><td>1</td></e≤20<>	147	2339	2486	146	2341	2487	-1	2	1
5 <e≤10< td=""><td>190</td><td>2454</td><td>2644</td><td>195</td><td>2468</td><td>2663</td><td>5</td><td>14</td><td>19</td></e≤10<>	190	2454	2644	195	2468	2663	5	14	19
1 <e≤5< td=""><td>594</td><td>4597</td><td>5191</td><td>592</td><td>4596</td><td>5188</td><td>-2</td><td>-1</td><td>-3</td></e≤5<>	594	4597	5191	592	4596	5188	-2	-1	-3
E≤1	1354	9833	11187	1354	9909	11263	0	76	76
Total	2360	21417	23777	2366	21544	23910	6	127	133
M aximum (mSv)	49.05	86.30	86.30	49.31	87.01	87.01	-	=	-
Average (mSv)	3.05	6.63	6.27	3.09	6.67	6.32	-	-	-

<sup>(\*)</sup> 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 2020 (Internal and External)

Effective dose (E)	April 2020 - August 2020			April 2020 - September 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>160</td><td>160</td><td>0</td><td>249</td><td>249</td><td>0</td><td>89</td><td>89</td></e≤20<>	0	160	160	0	249	249	0	89	89
5 <e≤10< td=""><td>7</td><td>579</td><td>586</td><td>10</td><td>678</td><td>688</td><td>3</td><td>99</td><td>102</td></e≤10<>	7	579	586	10	678	688	3	99	102
1 <e≤5< td=""><td>144</td><td>1337</td><td>1481</td><td>168</td><td>1395</td><td>1563</td><td>24</td><td>58</td><td>82</td></e≤5<>	144	1337	1481	168	1395	1563	24	58	82
E≤1	1000	4897	5897	1000	4910	5910	0	13	13
Total	1151	6973	8124	1178	7232	8410	27	259	286
M aximum (mSv)	7.28	17.30	17.30	8.96	17.30	17.30	-	-	-
Average (mSv)	0.39	1.50	1.35	0.48	1.70	1.53	-	-	-

<sup>(\*)</sup> 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

(Specified high-dose work has not been performed since October 2015.)

Effective dose (E)	March 2011 - September 2015					
mSv	-					
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 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 mSy
  - 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.