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

(Updated on 29 June 2018)

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)

tumbers of workers who entered each area every month,									
Effective dose (E)	March 2018			April 2018			May 2018		
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>0</td><td>0</td></e≤20<>	0	0	0	0	0	0	0	0	0
5 <e≤10< td=""><td>0</td><td>69</td><td>69</td><td>0</td><td>26</td><td>26</td><td>0</td><td>19</td><td>19</td></e≤10<>	0	69	69	0	26	26	0	19	19
1 <e≤5< td=""><td>46</td><td>768</td><td>814</td><td>13</td><td>509</td><td>522</td><td>14</td><td>439</td><td>453</td></e≤5<>	46	768	814	13	509	522	14	439	453
E≤ 1	935	6,394	7,329	1,001	5,840	6,841	890	5,848	6,738
Total	981	7,231	8,212	1,014	6,375	7,389	904	6,306	7,210
Maximum (mSv)	2.96	8.83	8.83	2.40	8.40	8.40	1.88	8.47	8.47
Average (mSv)	0.17	0.45	0.42	0.11	0.33	0.30	0.12	0.27	0.25

^(*) 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)

y comomed cumulative Effective Dose from riprin 2010 (international Effective)									
Effective dose (E)	April 2016 - April 2018			April 2016 - May 2018			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>31</td><td>31</td><td>0</td><td>35</td><td>35</td><td>0</td><td>4</td><td>4</td></e≤75<>	0	31	31	0	35	35	0	4	4
20 <e≤50< td=""><td>8</td><td>970</td><td>978</td><td>9</td><td>1,006</td><td>1,015</td><td>1</td><td>36</td><td>37</td></e≤50<>	8	970	978	9	1,006	1,015	1	36	37
10 <e≤20< td=""><td>98</td><td>1,760</td><td>1,858</td><td>101</td><td>1,772</td><td>1,873</td><td>3</td><td>12</td><td>15</td></e≤20<>	98	1,760	1,858	101	1,772	1,873	3	12	15
5 <e≤10< td=""><td>145</td><td>1,941</td><td>2,086</td><td>146</td><td>1,955</td><td>2,101</td><td>1</td><td>14</td><td>15</td></e≤10<>	145	1,941	2,086	146	1,955	2,101	1	14	15
1 <e≤5< td=""><td>494</td><td>4,445</td><td>4,939</td><td>503</td><td>4,462</td><td>4,965</td><td>9</td><td>17</td><td>26</td></e≤5<>	494	4,445	4,939	503	4,462	4,965	9	17	26
E≤1	1,183	8,038	9,221	1,178	8,095	9,273	-5	57	52
Total	1,928	17,185	19,113	1,937	17,325	19,262	9	140	149
Maximum (mSv)	24.55	70.76	70.76	24.96	71.75	71.75	-	-	-
Average (mSv)	2.07	4.75	4.48	2.12	4.81	4.54	-	-	-

^(*) 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).

^(*) As a new 5-year dose period began in April 2016, the 5-year accumulated dose will be described in April 2017 or later.

(3) Combined Cumulative Effective Dose from April 2018 (Internal and External)

Effective dose (E)	April 2018			April 2018 - May 2018			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>0</td><td>0</td><td>0</td><td>13</td><td>13</td><td>0</td><td>13</td><td>13</td></e≤20<>	0	0	0	0	13	13	0	13	13
5 <e≤10< td=""><td>0</td><td>26</td><td>26</td><td>0</td><td>82</td><td>82</td><td>0</td><td>56</td><td>56</td></e≤10<>	0	26	26	0	82	82	0	56	56
1 <e≤5< td=""><td>13</td><td>509</td><td>522</td><td>52</td><td>885</td><td>937</td><td>39</td><td>376</td><td>415</td></e≤5<>	13	509	522	52	885	937	39	376	415
E≤1	1,001	5,840	6,841	1,034	6,067	7,101	33	227	260
Total	1,014	6,375	7,389	1,086	7,047	8,133	72	672	744
Maximum (mSv)	2.40	8.40	8.40	3.50	13.57	13.57	-	-	-
Average (mSv)	0.11	0.33	0.30	0.20	0.54	0.49	-	-	-

^(*) 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) mSv	March 2011- September 2015						
100 <e< td=""><td colspan="7">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 colspan="6">267</td></e≤50<>	267						
10 <e≤20< td=""><td colspan="6">186</td></e≤20<>	186						
5 <e≤10< td=""><td colspan="6">129</td></e≤10<>	129						
1 <e≤5< td=""><td colspan="5">145</td></e≤5<>	145						
E≤1	51						
Total	1,203						
Maximum (mSv)	102.69						
Average (mSv)	36.49						

- (*) 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.
- (*) Workers engaged in specified high-dose work in each month is the number of workers registered as workers engaged in specified high-dose work in that month.
 - However, the total of March 2011 to September 2015 includes workers released from specified high-dose work.
- (*) 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.