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

(Updated on 31 October 2017)

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) mSv	July 2017			August 2017			September 2017		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100<E	0	0	0	0	0	0	0	0	0
75<E≤100	0	0	0	0	0	0	0	0	0
50<E≤75	0	0	0	0	0	0	0	0	0
20<E≤50	0	0	0	0	0	0	0	0	0
10<E≤20	0	2	2	0	0	0	0	0	0
5<E≤10	0	55	55	0	19	19	0	12	12
1<E≤5	14	847	861	19	651	670	15	608	623
E≤ 1	1,001	7,211	8,212	979	7,164	8,143	976	7,042	8,018
Total	1,015	8,115	**9,130**	998	7,834	**8,832**	991	7,662	**8,653**
Maximum (mSv)	3.80	11.50	11.50	3.20	7.60	7.60	3.04	6.40	6.40
Average (mSv)	0.13	0.42	0.39	0.13	0.32	0.30	0.11	0.28	0.26

(*) 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) mSv	April 2016 – August 2017			April 2016 - September 2017			Difference		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100<E	0	0	0	0	0	0	0	0	0
75<E≤100	0	0	0	0	0	0	0	0	0
50<E≤75	0	6	6	0	7	7	0	1	1
20<E≤50	0	565	565	0	613	613	0	48	48
10<E≤20	53	1,381	1,434	54	1,399	1,453	1	18	19
5<E≤10	116	1,637	1,753	127	1,680	1,807	11	43	54
1<E≤5	460	4,515	4,975	472	4,541	5,013	12	26	38
E≤1	1,175	7,473	8,648	1,199	7,566	8,765	24	93	117
Total	1,804	15,577	**17,381**	1,852	15,806	**17,658**	48	229	**277**
Maximum (mSv)	18.55	53.46	53.46	19.21	55.39	55.39	-	-	-
Average (mSv)	1.59	3.87	3.63	1.61	3.95	3.71	-	-	-

(*) 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 2017 (Internal and External)

Effective dose (E) mSv	April 2017 - August 2017			April 2017 - September 2017			Difference		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100<E	0	0	0	0	0	0	0	0	0
75<E≤100	0	0	0	0	0	0	0	0	0
50<E≤75	0	0	0	0	0	0	0	0	0
20<E≤50	0	21	21	0	30	30	0	9	9
10<E≤20	0	313	313	0	404	404	0	91	91
5<E≤10	14	666	680	17	717	734	3	51	54
1<E≤5	201	2,238	2,439	230	2,526	2,756	29	288	317
E≤1	1,138	7,204	8,342	1,166	7,119	8,285	28	-85	-57
Total	1,353	10,442	**11,795**	1,413	10,796	**12,209**	60	354	**414**
Maximum (mSv)	6.84	29.53	29.53	8.84	29.57	29.57	-	-	-
Average (mSv)	0.54	1.58	1.46	0.60	1.73	1.60	-	-	-

(*) 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	1
75<E≤100	191
50<E≤75	233
20<E≤50	267
10<E≤20	186
5<E≤10	129
1<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.