

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

(Updated on 30 November 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	August 2017			September 2017			October 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	0	0	0	0	0	0	0	0
5<E≤10	0	19	19	0	16	16	0	29	29
1<E≤5	19	651	670	15	657	672	28	678	706
E≤1	979	7,164	8,143	1,033	7,082	8,115	952	6,841	7,793
Total	998	7,834	8,832	1,048	7,755	8,803	980	7,548	8,528
Maximum (mSv)	3.20	7.60	7.60	3.30	7.50	7.50	2.48	9.71	9.71
Average (mSv)	0.13	0.32	0.30	0.11	0.32	0.30	0.14	0.33	0.31

(*) 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 - September 2017			April 2016 - October 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	7	7	0	7	7	0	0	0
20<E≤50	0	612	612	1	661	662	1	49	50
10<E≤20	54	1,403	1,457	64	1,439	1,503	10	36	46
5<E≤10	127	1,695	1,822	124	1,757	1,881	-3	62	59
1<E≤5	463	4,525	4,988	470	4,534	5,004	7	9	16
E≤1	1,208	7,565	8,773	1,220	7,669	8,889	12	104	116
Total	1,852	15,807	17,659	1,879	16,067	17,946	27	260	287
Maximum (mSv)	19.21	55.56	55.56	20.33	57.32	57.32	-	-	-
Average (mSv)	1.61	3.97	3.72	1.66	4.06	3.81	-	-	-

(*) 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 - September 2017			April 2017 - October 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	30	30	0	40	40	0	10	10
10<E≤20	0	412	412	1	495	496	1	83	84
5<E≤10	18	726	744	29	816	845	11	90	101
1<E≤5	227	2,519	2,746	251	2,793	3,044	24	274	298
E≤1	1,169	7,110	8,279	1,179	7,009	8,188	10	-101	-91
Total	1,414	10,797	12,211	1,460	11,153	12,613	46	356	402
Maximum (mSv)	9.10	29.57	29.57	11.21	29.57	29.57	-	-	-
Average (mSv)	0.60	1.76	1.63	0.68	1.93	1.78	-	-	-

(*) 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.