

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

(Updated on 1 December 2014)

1 Number of Workers (Later than 11 March 2011)

	Persons	Increase	Emergency workers(*)	Updated on
Total Workers	39,190	657	19,346	As of 31 October, 2014 (Obtained on 1 December)
TEPCO	4,358	25	3,391	
Contractors	34,832	632	15,955	

(*) As of the end of December 2011; Targeted workers are now being identified by closely examining the database.

2 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 2014			September 2014			October 2014		
	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	9	9	0	36	36	0	5	5
5<E<=10	0	214	214	1	288	289	0	192	192
1<E<=5	39	1,338	1,377	51	1,634	1,685	50	1,661	1,711
E<= 1	1,062	7,810	8,872	1,110	8,001	9,111	972	7,715	8,687
Total	1,101	9,371	10,472	1,162	9,959	11,121	1,022	9,573	10,595
Maximum (mSv)	3.40	17.13	17.13	6.00	18.22	18.22	2.42	13.18	13.18
Average (mSv)	0.25	0.72	0.67	0.27	0.84	0.78	0.23	0.72	0.67

(*) 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 March 2011 (Internal and External)

Effective dose (E) mSv	March 2011-September 2014			March 2011-October 2014			Difference		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
250<E	6	0	6	6	0	6	0	0	0
200<E<=250	1	2	3	1	2	3	0	0	0
150<E<=200	25	2	27	25	2	27	0	0	0
100<E<=150	118	20	138	118	20	138	0	0	0
75<E<=100	281	163	444	283	166	449	2	3	5
50<E<=75	321	1,140	1,461	321	1,176	1,497	0	36	36
20<E<=50	620	5,048	5,668	620	5,130	5,750	0	82	82
10<E<=20	566	4,668	5,234	570	4,730	5,300	4	62	66
5<E<=10	475	4,465	4,940	480	4,524	5,004	5	59	64
1<E<=5	765	8,282	9,047	770	8,445	9,215	5	163	168
E<= 1	1,155	10,410	11,565	1,164	10,637	11,801	9	227	236
Total	4,333	34,200	38,533	4,358	34,832	39,190	25	632	657
Maximum (mSv)	678.80	238.42	678.80	678.80	238.42	678.80	-	-	-
Average (mSv)	23.07	10.77	12.16	22.99	10.78	12.13	-	-	-

(*) The number of new comers in October 2014 was 657.

(*) There has been no significant internal exposure reported since October 2011.

(*) 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 2014 (Internal and External)

Effective dose (E) mSv	April 2014-September 2014			April 2014-October 2014			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	1	280	281	1	362	363	0	82	82
10<E<=20	10	1,035	1,045	10	1,197	1,207	0	162	162
5<E<=10	67	1,690	1,757	92	1,930	2,022	25	240	265
1<E<=5	486	4,535	5,021	514	4,751	5,265	28	216	244
E<= 1	940	6,409	7,349	939	6,564	7,503	-1	155	154
Total	1,504	13,949	15,453	1,556	14,804	16,360	52	855	907
Maximum (mSv)	20.55	39.85	39.85	21.93	39.85	39.85	-	-	-
Average (mSv)	1.34	3.36	3.16	1.44	3.63	3.42	-	-	-

(*) 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) Combined Cumulative Effective Dose of Workers to Whom Emergency Dose Limits Apply*

Effective dose (E) mSv	Aug. 2014	Sep. 2014	Oct. 2014	March 2011-October 2014
100<E	0	0	0	1
75<E<=100	0	0	0	172
50<E<=75	0	0	0	214
20<E<=50	0	0	0	257
10<E<=20	0	0	0	155
5<E<=10	0	1	0	123
1<E<=5	37	49	50	148
E<= 1	576	566	521	39
Total	613	616	571	1,109
Maximum (mSv)	3.40	6.00	2.42	102.69
Average (mSv)	0.35	0.38	0.30	36.54

(*) Workers under the application of the emergency dose limit (100mSv) shown in Article 7 of the Ordinance on Prevention of Ionizing Radiation Hazards

Specifically, they are workers engaged in work to maintain the function of cooling reactors or spent fuel tanks or to maintain the function to control or prevent the release of a huge amount of radioactive material due to trouble or a breakdown at a reactor facility, in an area where radiation dose rates exceed 0.1 mSv/h, around any reactor facilities, steam turbines and related facilities, and the vicinity thereof in the NPP. Until now, all designated workers have been TEPCO employees.

(*) The monthly number of workers to whom emergency dose limits apply is the number of workers who have filed applications as such. However, the cumulative number for the period between March 2011 and October 2014 includes those whose designation was removed.

(*) 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 October 2014 exceeded 100.