

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

(Updated on 26 December 2014)

1 Number of Workers (Later than 11 March 2011)

	Persons	Increase	Emergency workers(*)	Updated on
Total Workers	39,904	702	19,675	As of 30 November, 2014 (Obtained on 26 December)
TEPCO	4,360	12	3,636	
Contractors	35,544	690	16,039	

(*) As of November 2014; Including workers to whom emergency dose limits apply

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	September 2014			October 2014			November 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	36	36	0	18	18	0	10	10
5<E<=10	1	288	289	0	234	234	0	207	207
1<E<=5	51	1,634	1,685	62	1,766	1,828	40	1,602	1,642
E<= 1	1,110	8,001	9,111	1,112	7,935	9,047	990	7,954	8,944
Total	1,162	9,959	11,121	1,174	9,953	11,127	1,030	9,773	10,803
Maximum (mSv)	6.00	18.22	18.22	2.70	14.92	14.92	2.62	13.40	13.40
Average (mSv)	0.27	0.84	0.78	0.29	0.80	0.75	0.20	0.71	0.66

(*) 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-October 2014			March 2011-November 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	26	2	28	26	2	28	0	0	0
100<E<=150	117	20	137	117	20	137	0	0	0
75<E<=100	285	166	451	286	169	455	1	3	4
50<E<=75	322	1,180	1,502	325	1,212	1,537	3	32	35
20<E<=50	623	5,154	5,777	619	5,232	5,851	-4	78	74
10<E<=20	577	4,726	5,303	582	4,848	5,430	5	122	127
5<E<=10	478	4,523	5,001	476	4,601	5,077	-2	78	76
1<E<=5	782	8,460	9,242	791	8,551	9,342	9	91	100
E<= 1	1,131	10,621	11,752	1,131	10,907	12,038	0	286	286
Total	4,348	34,854	39,202	4,360	35,544	39,904	12	690	702
Maximum (mSv)	678.80	238.42	678.80	678.80	238.42	678.80	-	-	-
Average (mSv)	23.20	10.80	12.17	23.18	10.78	12.14	-	-	-

(*) The number of new comers in November 2014 was 702.

(*) 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-October 2014			April 2014-November 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	387	388	2	466	468	1	79	80
10<E<=20	10	1,202	1,212	16	1,425	1,441	6	223	229
5<E<=10	100	1,939	2,039	114	2,153	2,267	14	214	228
1<E<=5	525	4,754	5,279	545	4,836	5,381	20	82	102
E<= 1	921	6,554	7,475	906	6,854	7,760	-15	300	285
Total	1,557	14,836	16,393	1,583	15,734	17,317	26	898	924
Maximum (mSv)	22.15	39.85	39.85	23.13	39.85	39.85	-	-	-
Average (mSv)	1.51	3.69	3.48	1.62	3.92	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).

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

Effective dose (E) mSv	Sep. 2014	Oct. 2014	Nov. 2014	March 2011-November 2014
100<E	0	0	0	1
75<E<=100	0	0	0	174
50<E<=75	0	0	0	219
20<E<=50	0	0	0	253
10<E<=20	0	0	0	162
5<E<=10	1	0	0	120
1<E<=5	49	61	39	150
E<= 1	566	562	537	37
Total	616	623	576	1,116
Maximum (mSv)	6.00	2.70	2.62	102.69
Average (mSv)	0.38	0.41	0.27	36.68

(*) 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 November 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 November 2014 exceeded 100.