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

(Updated on 30 January 2015)

1 Number of Workers (Later than 11 March 2011)

	Persons	Increase	Emergency workers(*)	Updated on
Total Workers	40,569	625	19,675	As of 31 December, 2014 (Obtained on 30 January, 2015)
TEPCO	4,392	29	3,636	
Contractors	36,177	596	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)	October 2014			November 2014			December 2014		
mSv	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	18	18	0	19	19	0	21	21
5<E<=10	0	234	234	0	269	269	0	245	245
1<E<=5	62	1,766	1,828	45	1,644	1,689	49	1,870	1,919
E<= 1	1,112	7,935	9,047	1,141	8,179	9,320	982	7,950	8,932
Total	1,174	9,953	11,127	1,186	10,111	11,297	1,031	10,086	**11,117**
Maximum (mSv)	2.70	14.92	14.92	3.00	15.92	15.92	3.91	15.41	15.41
Average (mSv)	0.29	0.80	0.75	0.21	0.78	0.72	0.23	0.80	0.75

(*) 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)	March 2011-November 2014			March 2011-December 2014			Difference		
mSv	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	287	169	456	290	175	465	3	6	9
50<E<=75	325	1,220	1,545	327	1,253	1,580	2	33	35
20<E<=50	621	5,238	5,859	618	5,342	5,960	-3	104	101
10<E<=20	579	4,864	5,443	581	4,958	5,539	2	94	96
5<E<=10	483	4,587	5,070	487	4,667	5,154	4	80	84
1<E<=5	805	8,557	9,362	807	8,734	9,541	2	177	179
E<= 1	1,113	10,922	12,035	1,132	11,024	12,156	19	102	121
Total	4,363	35,581	39,944	4,392	36,177	**40,569**	29	596	**625**
Maximum (mSv)	678.80	238.42	678.80	678.80	238.42	678.80	-	-	-
Average (mSv)	23.21	10.80	12.16	23.11	10.85	12.17	-	-	-

(*) The number of new comers in December 2014 was 625.

(*) 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-November 2014			April 2014-December 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	2	484	486	5	604	609	3	120	123
10<E<=20	16	1,438	1,454	17	1,651	1,668	1	213	214
5<E<=10	115	2,162	2,277	130	2,340	2,470	15	178	193
1<E<=5	546	4,824	5,370	573	5,015	5,588	27	191	218
E<= 1	905	6,875	7,780	898	6,954	7,852	-7	79	72
Total	1,584	15,783	17,367	1,623	16,564	18,187	39	781	**820**
Maximum (mSv)	23.25	39.85	39.85	24.18	39.85	39.85	-	-	-
Average (mSv)	1.64	3.97	3.76	1.74	4.27	4.05	-	-	-

(*) 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	Oct. 2014	Nov. 2014	Dec. 2014	March 2011-December 2014
100<E	0	0	0	1
75<E<=100	0	0	0	178
50<E<=75	0	0	0	222
20<E<=50	0	0	0	250
10<E<=20	0	0	0	162
5<E<=10	0	0	0	126
1<E<=5	61	44	46	151
E<= 1	562	579	539	39
Total	623	623	585	1,129
Maximum (mSv)	2.70	3.00	3.91	102.69
Average (mSv)	0.41	0.31	0.30	36.57

(*) 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 December 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 December 2014 exceeded 100.