

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

provided by TEPCO
As of 31 October 2013

1 Number of Workers (Later than 11 March 2011)

		Person	Increase	Emergency Workers(*)	Date Update
Total Workers		29,813	478	19,346	30 Sep 13
	TEPCO	3,968	88	3,391	
	Contractor	25,845	390	15,955	

*Tentative Number

2 Radiation Exposure Dose Distribution

(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	13 Jul			13 Aug			13 Sep		
	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	40	40	0	33	33
5<E<=10	1	107	108	4	142	146	1	233	234
1<E<=5	96	1,128	1,224	117	1,209	1,326	81	1,344	1,425
E<= 1	892	3,750	4,642	835	3,666	4,501	861	3,571	4,432
Total	989	4,994	5,983	956	5,057	6,013	943	5,181	6,124
Maximum (mSv)	5.50	14.80	14.80	6.10	19.89	19.89	5.10	17.95	17.95
Average (mSv)	0.43	0.89	0.81	0.49	1.03	0.94	0.36	1.13	1.01

* External exposure was measured by PAD. The exposure dose is subject to change due to the replacement of PAD-measured dose to glass badge-measured dose. The number of workers is also subject to change due to the addition of workers who wore only glass badges.

(2) Combined Cumulative Effective Dose from March 2011 (Internal and External)

Effective Dose (E) mSv	March 2011-August 2013			March 2011-September 2013			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	24	2	26	24	2	26	0	0	0
100<E<=150	118	20	138	118	20	138	0	0	0
75<E<=100	246	96	342	248	97	345	2	1	3
50<E<=75	312	700	1,012	314	731	1,045	2	31	33
20<E<=50	609	3,901	4,510	607	3,962	4,569	-2	61	59
10<E<=20	531	3,592	4,123	534	3,633	4,167	3	41	44
5<E<=10	419	3,429	3,848	421	3,540	3,961	2	111	113
1<E<=5	649	6,506	7,155	653	6,531	7,184	4	25	29
E<= 1	965	7,207	8,172	1,042	7,327	8,369	77	120	197
Total	3,880	25,455	29,335	3,968	25,845	29,813	88	390	478
Maximum (mSv)	678.80	238.42	678.80	678.80	238.42	678.80	-	-	-
Average (mSv)	24.36	10.62	12.50	23.90	10.75	12.50	-	-	-

*Number of New comer in September was 478.

*Effective dose has been changed due to the re-evaluation of internal exposure dose in July 2013.

*There has been no significant internal exposure reported since October 2011. A part of internal exposure data is under review, and subject to change.

*External exposure was measured by PAD. The exposure dose is subject to change due to the replacement of PAD-measured dose to glass badge-measured dose. The number of workers is also subject to change due to the addition of workers who wore only glass badges.

(3) Combined Cumulative Effective Dose from April 2013 (Internal and external)

Effective Dose (E) mSv	April 2013-August 2013			April 2013-September 2013			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	3	64	67	3	117	120	0	53	53
10<E<=20	27	485	512	34	665	699	7	180	187
5<E<=10	72	991	1,063	94	1,193	1,287	22	202	224
1<E<=5	501	2,797	3,298	531	2,970	3,438	30	110	140
E<= 1	721	3,711	4,432	776	3,845	4,621	55	134	189
Total	1,324	8,048	9,372	1,438	8,727	10,165	114	679	793
Maximum(mSv)	22.70	38.24	38.24	25.88	39.49	39.49	-	-	-
Average(mSv)	1.73	2.86	2.70	1.83	3.31	3.10	-	-	-

* External exposure was measured by PAD. The exposure dose is subject to change due to the replacement of PAD-measured dose to glass badge-measured dose. The number of workers is also subject to change due to the addition of workers who wore only glass badges.

(4) Combined Cumulative Effective Dose of Emergency Dose Limits Applied Workers*

Effective Dose (E) mSv	13 July	13 Aug	13 Sep	March 2011-Sep 2013
100<E	0	0	0	1
75<E<=100	0	0	0	140
50<E<=75	0	0	0	202
20<E<=50	0	0	0	228
10<E<=20	0	0	0	105
5<E<=10	1	4	1	79
1<E<=5	93	107	80	88
E<= 1	476	444	450	44
Total	570	555	531	887
Maximum (mSv)	5.50	6.10	5.10	102.69
Average (mSv)	0.60	0.68	0.47	39.36

* The workers are under application of Emergency dose limit (100mSv) shown in “Ordinance on Prevention of Ionizing Radiation Hazards, chapter 7.” Specifically, it means the workers who engaged in work to maintain the function of cooling reactors or spent fuel tanks or work to maintain the function to control or prevent the release of a huge amount radioactive material due to trouble or break of the reactor facility, at the area where the radiation dose rate exceed 0.1 mSv/h around reactor facilities, steam turbines and related facilities and surrounding area in the NPP. Until now, all designated workers are TEPCO Employees.

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