

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

provided by TEPCO
As of 29 November 2013

1 Number of Workers (Later than 11 March 2011)

		Person	Increase	Emergency Workers(*)	Date Update
Total Workers		30,374	561	19,346	31 Oct 13
	TEPCO	4,033	65	3,391	
	Contractor	26,341	496	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 Aug			13 Sep			13 Oct		
	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	1	1	0	0	0
10<E<=20	0	40	40	0	61	61	0	28	28
5<E<=10	4	142	146	3	247	250	4	278	282
1<E<=5	117	1,208	1,325	102	1,416	1,518	130	1,516	1,646
E<= 1	835	3,668	4,503	933	3,524	4,457	813	3,500	4,313
Total	956	5,058	6,041	1038	5,249	6,287	947	5,322	6,269
Maximum (mSv)	6.10	19.89	19.89	5.60	20.58	20.58	8.19	15.22	15.22
Average (mSv)	0.49	1.03	0.94	0.43	1.28	1.14	0.48	1.27	1.15

* 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	249	98	347	254	102	356	5	4	9
50<E<=75	316	733	1,049	315	767	1,082	-1	34	33
20<E<=50	604	3,977	4,581	608	4,058	4,666	4	81	85
10<E<=20	534	3,647	4,181	531	3,721	4,252	-3	74	71
5<E<=10	426	3,533	3,959	432	3,581	4,013	6	48	54
1<E<=5	655	6,523	7,178	671	6,645	7,316	16	122	138
E<= 1	1,035	7,310	8,345	1,073	7,443	8,516	38	133	171
Total	3,968	25,845	29,813	4,033	26,341	30,374	65	496	561
Maximum (mSv)	678.80	238.42	678.80	678.80	238.42	678.80	-	-	-
Average (mSv)	23.93	10.79	12.54	23.66	10.84	12.54	-	-	-

*Number of New comer in October was 561.

*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-September 2013			April 2013-October 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	134	137	9	207	216	6	73	79
10<E<=20	34	687	721	37	898	935	3	211	214
5<E<=10	101	1,206	1,307	130	1,403	1,533	29	197	226
1<E<=5	548	2,901	3,449	567	3,022	3,589	19	121	140
E<= 1	752	3,799	4,551	782	3,895	4,677	30	96	126
Total	1,438	8,727	10,165	1,525	9,425	10,950	87	698	785
Maximum(mSv)	26.18	39.70	39.70	30.69	39.70	39.70	-	-	-
Average(mSv)	1.91	3.41	3.20	2.10	3.87	3.63	-	-	-

* 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 Aug	13 Sep	13 Oct	March 2011-Oct 2013
100<E	0	0	0	1
75<E<=100	0	0	0	146
50<E<=75	0	0	0	203
20<E<=50	0	0	0	230
10<E<=20	0	0	0	106
5<E<=10	4	3	4	90
1<E<=5	107	99	122	93
E<= 1	444	460	424	46
Total	555	562	550	915
Maximum (mSv)	6.10	5.60	8.19	102.69
Average (mSv)	0.68	0.60	0.64	38.76

* 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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