

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

(Updated on 31 July 2015)

## 1 Number of Workers (Later than 11 March 2011)

	Persons	Increase	Emergency Workers(*)	Updated on
Total Workers	44,021	420	19,675	As of 30 June 2015 (Obtained on 31 July)
TEPCO	4,491	6	3,636	
Contractors	39,530	414	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	April 2015			May 2015			June 2015		
	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	20	20	0	4	4	0	3	3
5<E<=10	0	248	248	0	97	97	0	148	148
1<E<=5	66	2,413	2,479	42	1,747	1,789	55	1,641	1,696
E<= 1	1,100	7,694	8,794	1,092	8,100	9,192	1,006	8,177	9,183
<b>Total</b>	<b>1,166</b>	<b>10,375</b>	<b>11,541</b>	<b>1,134</b>	<b>9,948</b>	<b>11,082</b>	<b>1,061</b>	<b>9,969</b>	<b>11,030</b>
Maximum (mSv)	4.80	15.60	15.60	2.12	11.40	11.40	3.54	11.21	11.21
Average (mSv)	0.27	0.93	0.86	0.20	0.66	0.61	0.22	0.64	0.60

(\*) 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- May 2015			March 2011- June 2015			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	298	206	504	301	214	515	3	8	11
50<E<=75	333	1,433	1,766	331	1,476	1,807	-2	43	41
20<E<=50	620	5,966	6,586	627	6,021	6,648	7	55	62
10<E<=20	603	5,464	6,067	601	5,499	6,100	-2	35	33
5<E<=10	492	5,093	5,585	498	5,134	5,632	6	41	47
1<E<=5	840	9,142	9,982	836	9,238	10,074	-4	96	92
E<= 1	1,149	11,788	12,937	1,147	11,924	13,071	-2	136	134
<b>Total</b>	<b>4,485</b>	<b>39,116</b>	<b>43,601</b>	<b>4,491</b>	<b>39,530</b>	<b>44,021</b>	<b>6</b>	<b>414</b>	<b>420</b>
Maximum (mSv)	678.80	238.42	678.80	678.80	238.42	678.80	-	-	-
Average (mSv)	22.99	11.21	12.42	23.01	11.25	12.45	-	-	-

(\*) Number of new comers in June 2015 was 420.

(\*) 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 2015 (Internal and External)**

Effective dose (E) mSv	April 2015 - May 2015			April 2015 - June 2015			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	0	1	1	0	6	6	0	5	5
10<E<=20	0	104	104	0	318	318	0	214	214
5<E<=10	3	755	758	13	1,052	1,065	10	297	307
1<E<=5	145	3,101	3,246	214	3,684	3,898	69	583	652
E<= 1	1,083	7,433	8,516	1,058	7,233	8,291	-25	-200	-225
<b>Total</b>	<b>1,231</b>	<b>11,394</b>	<b>12,625</b>	<b>1,285</b>	<b>12,293</b>	<b>13,578</b>	<b>54</b>	<b>899</b>	<b>953</b>
Maximum(mSv)	6.60	21.71	21.71	8.52	28.94	28.94	-	-	-
Average(mSv)	0.44	1.42	1.33	0.61	1.84	1.72	-	-	-

(\*) 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	Apr. 2015	May. 2015	Jun. 2015	March 2011- June 2015
100<E	0	0	0	1
75<E<=100	0	0	0	187
50<E<=75	0	0	0	229
20<E<=50	0	0	0	258
10<E<=20	0	0	0	176
5<E<=10	0	0	0	131
1<E<=5	57	35	49	140
E<= 1	549	561	534	26
<b>Total</b>	<b>606</b>	<b>596</b>	<b>583</b>	<b>1,148</b>
Maximum (mSv)	4.80	2.12	3.54	102.69
Average (mSv)	0.39	0.28	0.30	37.35

(\*) 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 June 2015 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 June 2015 exceeded 100.