

Exposure dose of workers engaged in emergency work at Fukushima Daiichi Nuclear  
Power Station and related matters

1. Distribution of exposure dose

The external exposure dose of workers who engaged in the emergency works until November and the accumulative dose since March are shown in Attachment 1.

2. Investigation status on the workers whose contact information is not identified

Investigation status on the workers who engaged in the emergency work and whom we lost contact with, and the evaluation of the workers whose exposure dose has not been evaluated yet are shown in the attachment 2.

Due to the following reasons, we revised the conventional summary and report of the exposure dose according to the month in which areas are newly entered

- The conventional summary of the numbers of workers newly entered in the area cannot correctly reflect the tendency of the exposure dose, as the numbers of the workers who newly enter in each area has decreased compared to the total number of the workers.
- In response to the completion of Step 2, we evaluated the workers whom we had not been able to evaluate and included the results in the summary as much as possible.
- Dose limit is managed by evaluating the accumulated effective dose (sum of both internal exposure dose and external exposure dose) in the emergency works.

End

## Distribution of Exposure Dose

### 1. Exposure dose

The distribution of external exposure dose of the workers who engaged in the emergency works during the period from March to the end of November (numbers of workers who entered each area every month) is shown in Table 1.

**Table 1**

classification (mSv)	March			April			May			June			July		
	TEPCO	Contractor	Total	TEPCO	Contractor	Total	TEPCO	Contractor	Total	TEPCO	Contractor	Total	TEPCO	Contractor	Total
Over 250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Over 200 - 250 or less	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Over 150 - 200 or less	6	3	9	0	0	0	0	0	0	0	0	0	0	0	0
Over 100 - 150 or less	20	8	28	0	0	0	0	0	0	0	0	0	0	0	0
Over 50 - 100 or less	108	55	163	1	24	25	0	1	1	0	0	0	0	0	0
Over 20 - 50 or less	274	146	420	58	135	193	15	96	111	0	70	70	3	26	29
Over 10 - 20 or less	560	323	883	173	485	658	70	420	490	29	301	330	17	193	210
10 or less	689	1,553	2,242	1,397	3,479	4,876	1,330	5,055	6,385	1,287	5,540	6,827	1,371	5,933	7,304
Total	1,657	2,088	3,745	1,629	4,123	5,752	1,415	5,572	6,987	1,316	5,911	7,227	1,391	6,152	7,543
Max. (mSv)	182.33	199.42	199.42	59.61	85.29	85.29	32.70	59.18	59.18	16.44	39.62	39.62	31.13	36.76	36.76
Ave. (mSv)	19.29	9.17	13.66	6.17	4.73	5.14	3.18	3.66	3.56	2.07	3.02	2.85	1.58	2.18	2.07

  

classification (mSv)	August			September			October			November		
	TEPCO	Contractor	Total	TEPCO	Contractor	Total	TEPCO	Contractor	Total	TEPCO	Contractor	Total
Over 250	0	0	0	0	0	0	0	0	0	0	0	0
Over 200 - 250 or less	0	0	0	0	0	0	0	0	0	0	0	0
Over 150 - 200 or less	0	0	0	0	0	0	0	0	0	0	0	0
Over 100 - 150 or less	0	0	0	0	0	0	0	0	0	0	0	0
Over 50 - 100 or less	0	0	0	0	0	0	0	0	0	0	0	0
Over 20 - 50 or less	1	9	10	0	19	19	3	3	6	0	0	0
Over 10 - 20 or less	16	124	140	2	113	115	15	90	105	3	62	65
10 or less	1,269	5,728	6,997	1,217	5,652	6,869	1,162	5,289	6,451	950	5,007	5,957
Total	1,286	5,861	7,147	1,219	5,784	7,003	1,180	5,382	6,562	953	5,069	6,022
Max. (mSv)	21.54	29.25	29.25	11.35	35.50	35.50	35.30	25.41	35.30	11.50	19.51	19.51
Ave. (mSv)	1.60	1.88	1.83	1.39	1.80	1.73	1.53	1.68	1.65	0.84	1.29	1.22

\* As the internal exposure dose is evaluated during the period between two months in many cases, they are included in the accumulative exposure dose (Table 2), not in the monthly exposure dose (Table 1).

### 2. Distribution of sum of external exposure dose and internal exposure dose

The accumulative exposure dose at the end of October (March 11 to Oct 31) and at the end of November (March 11 to Nov 30) of the workers who engaged in the emergency works.

**Table 2**

classification (mSv)	March - October			March - November			Fluctuation		
	TEPCO	Contractor	Total	TEPCO	Contractor	Total	TEPCO	Contractor	Total
Over 250	6	0	6	6	0	6	0	0	0
Over 200 - 250 or less	1	2	3	1	2	3	0	0	0
Over 150 - 200 or less	19	2	21	21	2	23	2	0	2
Over 100 - 150 or less	116	23	139	116	23	139	0	0	0
Over 50 - 100 or less	354	308	662	366	320	686	12	12	24
Over 20 - 50 or less	627	1,686	2,313	631	1,824	2,455	4	138	142
Over 10 - 20 or less	493	2,320	2,813	474	2,452	2,926	-19	132	113
10 or less	1,648	10,175	11,823	1,701	10,907	12,608	53	732	785
Total	3,264	14,516	17,780	3,316	15,530	18,846	52	1,014	1,066
Max. (mSv)	678.80	238.42	678.80	678.80	238.42	678.80	-	-	-
Ave. (mSv)	23.36	9.38	11.95	23.52	9.25	11.76	-	-	-

**Investigation of workers whose contact information unknown  
for exposure dose control**

1. Result of investigation

The number of workers whose contact information is unknown is 10 (as of December 27). Since the last report, it turned out that 6 more workers had not been in contact. There has been no worker whose contact information is unknown since July 2011.

2. Current status of investigation

The number of workers whose contact information was unknown was 16 in the last report in November. However, as a result of continuous investigation on the addresses of the missing workers by the cooperating companies, addresses of 3 workers have been confirmed.

After we announced the names of the last 13 workers on our website and appealed for information, it turned out that 3 workers had not engaged in the work at 1F site.

3. Evaluation of the workers whose doses have not been evaluated

In the report as of the end of November, there were 109 workers who had engaged in the emergency work since March and newly entered in the areas in each month without internal exposure dose measurement (including the 3 workers who had not engaged in the works at 1F site). 85 workers of them have completed the internal exposure dose measurement or are planned to undergo the measurement.

Regarding the 14 workers who are not able to undergo the measurement due to the individual reasons, we evaluated their internal exposure doses according to their work records and reflected the results to the report "Distribution of Exposure Dose" (Attachment 1, table 2).