

Enhancing controls of internal exposures at Fukushima Daiichi Nuclear Power Station

1. Distribution of exposure dose



The internal exposure dose of workers who newly engaged in the emergency works in the power station in July 2011 is shown in Attachment 1.

2. Investigation of workers whose contact information unknown for exposure dose control

Countermeasure for the workers whose contact information unknown and who engaged in the emergency works is shown in Attachment 2.

Distribution of Exposure Dose

【Scope of Coverage】

Number of Emergency Workers	External Exposure	Internal Exposure		External + Internal Exposure
Since March:3,763 Since April:3,620 Since May:3,071 Since June:2,183 Since July:2,204	3,763(March) 3,620(April) 3,071(May) 2,183(June) 2,204(July)	WBC before Sep.12	3,757(March) 3,567(April) 3,011(May) 2,059(June) 1,991(July)  Table 2	3,757(March) 3,567(April) 3,011(May) 2,059(June) 1,991(July)  Table 3
		To be evaluated	6(March) 53(April) 60(May) 124(June) 213(July)	6(March) 53(April) 60(May) 124(June) 213(July)

(*) The results do not include those who worked outside Fukushima Daiichi Nuclear Power Station.

1. External Exposure Dose

Table 1 shows the distribution of external exposure dose (*1) until the end of July (from March 11 to 31, from April 1 to 30, from May 1 to 31, from June 1 to 30, from July 1 to 31) of those who engaged in emergency works.

*1 The results in April, May, June and July do not include the external exposure dose during the stay inside Main Anti-Earthquake Building and the move to Fukushima Daiichi Nuclear Power Station. However, such data as glass badges may be included. The results in April, May, June and July include the double-counted and those who do not need to be evaluated.

Table 1

m S v	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 ~ less or equal to 250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
over 150 ~ less or equal to 200	6	3	9	0	0	0	0	0	0	0	0	0	0	0	0
over 100 ~ less or equal to 150	20	8	28	0	0	0	0	0	0	0	0	0	0	0	0
over 50 ~ less or equal to 100	108	55	163	0	2	2	0	0	0	0	0	0	0	0	0
over 20 ~ less or equal to 50	269	146	415	6	50	56	2	19	21	0	17	17	0	6	6
over 10 ~ less or equal to 20	561	324	885	22	248	270	9	123	132	1	94	95	0	69	69
over 0 ~ less or equal to 10	689	1,574	2,263	592	2,700	3,292	271	2,647	2,918	183	1,888	2,071	219	1,910	2,129
Total	1,653	2,110	3,763	620	3,000	3,620	282	2,789	3,071	184	1,999	2,183	219	1,985	2,204
Max. (m S v)	182.33	199.42	199.42	42.73	65.92	65.92	24.61	41.59	41.59	11.94	38.66	38.66	3.89	31.22	31.22
Ave. (m S v)	19.30	9.10	13.60	2.10	3.40	3.20	2.44	2.76	2.73	1.05	2.27	2.17	0.45	1.93	1.78

2. Internal exposure dose

Table 2 shows the distribution of internal exposure dose (²) for workers who had WBC measurement by September 12, out of those who have once experienced emergency works.

*2 The evaluation result may be reviewed depend on the evaluation progress by investigation regarding irradiated date and/or detailed evaluation by JAEA.

Table 2

m S v	March			April			May			June			July		
	TEPCO	Contractor	Total	TEPCO	Contractor	Total	TEPCO	Contractor	Total	TEPCO	Contractor	Total	TEPCO	Contractor	Total
over 250	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
over 200 ~ less or equal to 250	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
over 150 ~ less or equal to 200	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
over 100 ~ less or equal to 150	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
over 50 ~ less or equal to 100	36	42	78	0	0	0	0	0	0	0	0	0	0	0	0
over 20 ~ less or equal to 50	179	79	258	0	1	1	0	0	0	0	0	0	0	0	0
over 10 ~ less or equal to 20	399	263	662	1	20	21	0	1	1	0	0	0	0	0	0
over 0 ~ less or equal to 10	1,027	1,720	2,747	619	2,926	3,545	282	2,728	3,010	184	1,875	2,059	219	1,772	1,991
Total	1,653	2,104	3,757	620	2,947	3,567	282	2,729	3,011	184	1,875	2,059	219	1,772	1,991
Max. (m S v)	590.00	98.53	590.00	18.81	41.80	41.80	0.24	10.12	10.12	0.09	0.86	0.86	0.24	1.90	1.90
Ave. (m S v)	12.00	6.30	8.80	0.30	0.70	0.60	0.02	0.12	0.11	0.01	0.02	0.02	0.01	0.02	0.02

3. Total dose of internal and external exposure

The total dose of internal and external exposure for workers who had evaluation of internal exposure dose is shown in Table 3.

Table 3 .

m S v	March			April			May			June			July		
	TEPCO	Contractor	Total	TEPCO	Contractor	TEPCO	Contractor	Total	TEPCO	Contractor	TEPCO	Contractor	Total	TEPCO	Contractor
over 250	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0
over 200 ~ less or equal to 250	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0
over 150 ~ less or equal to 200	12	2	14	0	0	0	0	0	0	0	0	0	0	0	0
over 100 ~ less or equal to 150	62	15	77	0	0	0	0	0	0	0	0	0	0	0	0
over 50 ~ less or equal to 100	194	112	306	0	3	3	0	0	0	0	0	0	0	0	0
over 20 ~ less or equal to 50	527	332	859	9	72	81	2	20	22	0	17	17	0	6	6
over 10 ~ less or equal to 20	536	502	1,038	20	285	305	9	136	145	1	94	95	0	69	69
over 0 ~ less or equal to 10	316	1,139	1,455	591	2,587	3,178	271	2,573	2,844	183	1,764	1,947	219	1,697	1,916
Total	1,653	2,104	3,757	620	2,947	3,567	282	2,729	3,011	184	1,875	2,059	219	1,772	1,991
Max. (m S v)	670.36	238.42	670.36	45.55	69.28	69.28	24.77	41.61	41.61	11.94	38.66	38.66	3.91	31.24	31.24
Ave. (m S v)	31.30	15.40	22.40	2.40	4.10	3.80	2.45	2.92	2.88	1.05	2.40	2.28	0.47	2.09	1.92

END

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

1. Comparison with previous report (August 31)

The number of workers whose contact information was unknown and who were newly engaged in works in the Nuclear Power Station from March to June was 88 persons in the previous report (August 31). However, the number has been reduced to 65 persons in this report by reviewing of APD borrowers lists and WBC examination recipients lists, and requesting reconfirmation to the prime contractors.

There was no worker, whose contact information was unknown, and who was newly engaged in the emergency works in July.

2. Current status of investigation and future efforts

We have conducted interview with prime contractors regarding several of missing workers whose contact information was unknown on March and April (6 persons of 2 companies).

We will continue interviewing effectively based on accurate data aiming for completion of the investigation in the end of September.

END