

July 13, 2011

Tokyo Electric Power Company

Evaluation status of exposed dose of employees engaged in emergency work in  
Fukushima Daiichi Nuclear Power Station

1. Those whose internally exposed dose exceeded 100 mSv

On June 20, we announced that there were 42 employees engaged in March 2011 whose internally exposed dose exceeded 100 mSv. As a result of a subsequent count, we found the number was 51. We conducted the second evaluation to the 51 employees and found there were 12 ones whose internally exposed dose exceeded 100 mSv.

All of the 12 employees belong to TEPCO and have been working to stabilize events from the beginning of their occurrence.

2. Progress situation of specifying who should be measured regarding internally exposed dose

We will show you in Attachment 2 externally and internally exposed dose and effective dose of their total.

3. Externally exposed dose in May

We will show you in Attachment 3 externally exposed dose of employees engaged in emergency work from May.

4. Enhancement of organizations regarding radiation work notices

Regarding work in which an employee will be exposed to more than 1 mSv a day, we have to submit to relevant labor standards supervision office a radiation work notice in which we will describe occupational health management such as methods and instructions of radiation protection and precautions on heat disorder. Hence, we have reviewed and established organizations to implement their preparations, confirmations and prompt submissions, increased in manpower and make clear its roles.

END

(Attachment 1)

**Those whose internally exposed dose has exceeded 100 mSv**

(Unit: mSv)

<b>ID</b>	<b>Classification</b>	<b>Committed Dose</b>
①	TEPCO	590.0
②	TEPCO	540.0
③	TEPCO	433.1
④	TEPCO	327.9
⑤	TEPCO	259.7
⑥	TEPCO	241.8
⑦	TEPCO	166.1
⑧	TEPCO	137.3
⑨	TEPCO	120.0
⑩	TEPCO	119.6
⑪	TEPCO	117.3
⑫	TEPCO	101.3

Dose had been measured by July 8, 2011.

## Distribution of Exposed Dose

### [Measured Range]

Emergency Worker	Externally Exposed	Internally Exposed (Provisional *)		Externally + Internally Exposed (Provisional*)
3,771 employees have worked since March; 4,567 employees have worked since April	3,771 (March) 4,567(April)  ➡ Fig.1	Received WBC by July 13	3,538 (March) 3,254 (April) ➡ Fig. 2	3,538 (March) 3,254 (April) ➡ Fig. 3
		Will receive WBC	233(March) 1,313 (April)	233(March) 1,313 (April)

\* Provisional figures (Confirmed ones for TEPCO employees)

Employees engaged outside of the site of Fukushima Daiichi Nuclear Power Station have been excluded.

### 1. Externally Exposed Dose:

We will show you a distribution of externally exposed dose<sup>\*1</sup> until the end of April (March 11 to 31 and April 1 to 30) of employees who had been engaged in emergency work in Figure 1.

\*1 The externally exposed dose in April did not include that during stay in Main Anti-Earthquake Building and in motion. (However, data collected in glass badges might be included)

\* We did some double counts and counted those who should not be included.

**Figure 1**

Classification (mSv)	March			April		
	TEPCO	Partners' Companies	Total	TEPCO	Partners' Companies	Total
Over 250	0	0	0	0	0	0
Over 200 – 250	0	0	0	0	0	0
Over 150 - 200	6	3	9	0	0	0
Over 100 - 150	22	8	30	0	0	0
Over 50 - 100	107	56	163	0	4	4
Over 20 - 50	266	142	408	8	53	61
Over 10 - 20	558	322	880	23	248	271
- 10	693	1588	2,281	668	3,563	4,231
Total	1,652	2,119	3,771	699	3,868	4,567
Maximum (mSv)	182.3	199.4	199.4	42.7	65.9	65.9
Average (mSv)	19.0	9.0	13.4	2.0	2.8	2.7

### 2. Internally Exposed Dose (Provisional)

We will show you a distribution of internally exposed dose (provisional values [confirmed ones for TEPCO employees]<sup>\*2</sup>) of employees who had engaged in emergency work and those who underwent WBC measurement by July 13 in Figure 2.

\*2 Provisional Values: Evaluated values based on the assumption that values will be the maximum if each employee takes all of radioactive materials in a day of the start of his work (on March 12 if he has been working from the beginning) in case we do not survey when he took them.

\* The evaluation was reassessed with behavior surveys and the detailed evaluation conducted by JAES was included.

**Figure 2**

Classification (mSv)	March			April		
	TEPCO	Partners' Companies	Total	TEPCO	Partners' Companies	Total
Over 250	5	0	5	0	0	0
Over 200 – 250	1	0	1	0	0	0
Over 150 - 200	1	0	1	0	0	0
Over 100 - 150	5	0	5	0	0	0
Over 50 - 100	51	37	88	2	4	6
Over 20 - 50	174	82	256	6	15	21
Over 10 - 20	380	220	600	11	44	55
- 10	1,016	1,566	2,582	677	2,495	3,172
Total	1,633	1,905	3,538	696	2,558	3,254
Maximum (mSv)	590.0	96.8	590.0	72.0	88.1	88.1
Average (mSv)	12.6	6.3	9.2	1.1	1.1	1.1

### 3. Total of Externally and Internally Exposed Dose

Regarding internally exposed dose of the employees as measured in the aforementioned section 2 (provisional values [confirmed ones for TEPCO employees]), we will show you a distribution of the total (the internal exposed dose plus external one) in Figure 3.

**Figure 3**

Classification (mSv)	March			April		
	TEPCO	Partners' Companies	Total	TEPCO	Partners' Companies	Total
Over 250	6	0	6	0	0	0
Over 200 – 250	1	2	3	0	0	0
Over 150 - 200	12	2	14	0	0	0
Over 100 - 150	72	16	88	0	0	0
Over 50 - 100	195	106	301	2	8	10
Over 20 - 50	504	309	813	18	78	96
Over 10 - 20	489	428	917	31	248	279
- 10	354	1,042	1,396	645	2,224	2,869
Total	1,633	1,905	3,538	696	2,558	3,254
Maximum (mSv)	670.4	238.4	670.4	74.2	88.2	88.2
Average (mSv)	31.7	15.7	23.1	3.0	4.5	4.2

END

### Externally Exposed Dose (Newly engaged in Emergency Work at the Site in May)

Classification (mSv)	TEPCO	Partners' Companies	Total
Over 250	0	0	0
Over 200 – 250	0	0	0
Over 150 - 200	0	0	0
Over 100 - 150	0	0	0
Over 50 - 100	0	0	0
Over 20 - 50	3	18	21
Over 10 - 20	8	126	134
-10	370	4,247	4,617
<b>Total</b>	<b>381</b>	<b>4,391</b>	<b>4,772</b>
<b>Maximum (mSv)</b>	<b>24.61</b>	<b>41.59</b>	<b>41.59</b>
<b>Average (mSv)</b>	<b>1.93</b>	<b>1.84</b>	<b>1.85</b>

\* The externally exposed dose did not include that during stay in Main Anti-Earthquake Building and in motion.

## Enhancement of organizations regarding radiation work notices

We have been seriously tackling radiation work notices at emergency work, but extend our sincere apologies to delay of their submissions as a result. We would like to announce that we, including our head office, have reviewed and established the implementations of appropriate preparations for radiation work notices, confirmations and prompt submissions.

### 1. Increase in manpower

Whether Fukushima Daiichi Nuclear Power Station or our head office should handle, Fukushima Daiichi had done anything to confirm radiation work notices and contact to submit them. Therefore, we could not have smoothly submitted them. Based on the situation, each of our head office and Fukushima Daiichi Stabilization Center will have its own contact points in each offices and increase manpower in confirmations and submissions.

### 2. Clarification of roles

We have not specified where we should confirm or contact to submit notices or promptly noticed an instruction of corrections from Tomioka Labor Standards Supervision Office to our preparation sections. Based on the situation, we will make clear points to confirm or contact to submit them as follows. In case we receive correction instructions, contact points to submit notices will promptly instruct preparation sections to correct them and inform confirmation points and confirmation points will make sure that preparation sections will properly correct based on correction instructions.

	Preparation Sections	Confirmation points		Contact points to submit notices
		Heat Disorder etc.	Radiation Protection etc.	
Fukushima Daiichi	Each group in charge	Disaster Prevention and Safety Group	Radiation and Chemical Management Group Radiation Safety Group	Disaster Prevention and Safety Group
Fukushima Daiichi Stabilization Center	Each group in charge	Business Management Group, General Planning Dept.	Operational Radiation Management Group, Security and Environment Dept.	Operational Radiation Management Group, Security and Environment Dept.
Head Office	Each group in charge	Disaster Prevention and Safety Group, Nuclear Power Plant Management Dept.	Disaster Prevention and Safety Group, Nuclear Power Plant Management Dept.	Operational Radiation Management Group, Security and Environment Dept.

END