Attachment

Exposure Dose Distribution

1. Effective Dose of External Exposure

Table 1 shows the dose distributions of external exposure of the workers who were involved in radiation work at the Fukushima Daiichi Nuclear Power Station from June 2015 to August 2015 (for all who entered the Fukushima Daiichi Nuclear Power Station by month).

Table 1

Dose Range (mSv)	June 2015			July 2015			August 2015		
	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total
Above 100	0	0	0	0	0	0	0	0	0
75-100	0	0	0	0	0	0	0	0	0
50-75	0	0	0	0	0	0	0	0	0
20-50	0	0	0	0	0	0	0	0	0
10-20	0	12	12	0	7	7	0	1	1
5-10	0	167	167	1	134	135	0	32	32
1-5	64	1737	1801	56	1646	1702	51	974	1025
1 or less	1128	8185	9313	1116	8140	9256	980	8316	9296
Total	1192	10101	11293	1173	9927	11100	1031	9323	10354
Maximum (mSv)	3.90	11.50	11.50	5.10	10.72	10.72	3.38	10.65	10.65
Average (mSv)	0.25	0.72	0.67	0.26	0.66	0.62	0.18	0.39	0.37

*The value of the exposure doses and the number of the workers in the table above are subject to change due to the replacement of APD data with monthly dose data measured by integral dosimeters or the update of the dose data of the workers who wear only integral dosimeters (ex., the workers who enter only the Main Anti-earthquake Building) after the publication.

2. Sum of External and Internal Exposures (Effective Dose)

Table 2 compares the cumulative dose distributions of both external and internal exposures in the two different periods of time: from March 11, 2011 to July 31, 2015 and from March 11, 2011 to August 31, 2015. Table 3 shows the same distributions in the different time ranges: from April 2015 to July 2015 and from April 2015 to August 2015.

Table 2

Dose Range (mSv)	March 2011 - July 2015			March 2011 - August 2015			Difference		
	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total
Above 250	6	0	6	6	0	6	0	0	0
200-250	1	2	3	1	2	3	0	0	0
150-200	26	2	28	26	2	28	0	0	0
100-150	117	20	137	117	20	137	0	0	0
75-100	301	219	520	301	225	526	0	6	6
50-75	335	1518	1853	336	1550	1886	1	32	33
20-50	628	6110	6738	627	6137	6764	-1	27	26
10-20	605	5518	6123	610	5542	6152	5	24	29
5-10	498	5198	5696	497	5200	5697	-1	2	1
1-5	838	9260	10098	841	9321	10162	3	61	64
1 or less	1227	12108	13335	1239	12251	13490	12	143	155
Total	4582	39955	44537	4601	40250	44851	19	295	314
Maximum (mSv)	678.80	238.42	678.80	678.80	238.42	678.80	-	-	-
Average (mSv)	22.63	11.32	12.48	22.58	11.33	12.48	-	-	-

*The value of the exposure doses and the number of the workers in the table above are subject to change due to the replacement of APD data

with monthly dose data measured by integral dosimeters or the update of the dose data of the workers who wear only integral dosimeters (ex., the workers who enter only the Main Anti-earthquake Building) after the publication.

*No significant internal exposure has been reported since October 2011.

Table 3

Dose Range (mSv)	April 2015 - July 2015			April 2015 - August 2015			Difference		
	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total
Above 100	0	0	0	0	0	0	0	0	0
75-100	0	0	0	0	0	0	0	0	0
50-75	0	0	0	0	0	0	0	0	0
20-50	0	64	64	0	95	95	0	31	31
10-20	2	521	523	6	660	666	4	139	143
5-10	29	1324	1353	37	1428	1465	8	104	112
1-5	262	4008	4270	292	4308	4600	30	300	330
1 or less	1165	7092	8257	1161	6993	8154	-4	-99	-103
Total	1458	13009	14467	1496	13484	14980	38	475	513
Maximum (mSv)	11.82	34.05	34.05	12.48	35.71	35.71	-	-	-
Average (mSv)	0.79	2.31	2.16	0.89	2.50	2.34	-	-	-

*The value of the exposure doses and the number of the workers in the table above are subject to change due to the replacement of APD data with monthly dose data measured by integral dosimeters or the update of the dose data of the workers who wear only integral dosimeters (ex., the workers who enter only the Main Anti-earthquake Building) after the publication.

3. Sum of External and Internal Exposures of the "Workers Expected to Work under Especially High Radiation" (Effective Dose)

Table 4 shows the cumulative dose distributions of both external and internal radiation exposures of the "workers expected to work under especially high radiation."*[1] *[2]

Table 4

Dose Range (mSv)	June 2015	July 2015	August 2015	March 2011 - August 2015
Above 100	0	0	0	1
75-100	0	0	0	187
50-75	0	0	0	236
20-50	0	0	0	263
10-20	0	0	0	187
5-10	0	1	0	128
1-5	55	48	45	145
1 or less	548	537	500	56
Total	603	586	545	1203
Maximum (mSv)	3.90	5.10	3.38	102.69
Average (mSv)	0.37	0.38	0.25	36.29

(The number of the "workers expected to work under especially high radiation" in August 2015 was 585 out of which 40 workers has no records of working at the site in this month.)

*1 The "workers expected to work under especially high radiation" means workers who are involved in the operations in which they could be exposed to the emergency exposure dose limit (100mSv), which is stipulated in the "Ordinance on Prevention of Ionizing Radiation Hazards, Chapter 7." Specifically, they are the workers who are engaged in maintaining the functions to cool down the reactor facilities or the spent fuel pool in the area of reactor facilities, a steam turbine and its related facilities, or their surroundings where the radiation doses might exceed 0.1mSv/h. Or they are the workers who are engaged in keeping the functions to control or prevent the release of a large number of radioactive materials in case of malfunction or damage of the reactor facilities.

So far workers who have worked as “workers exposed to especially high radiation” are all TEPCO’s employees.

*2 The number of the “workers expected to work under especially high radiation” each month is the number of the workers who applied as such workers in a given month. The total numbers from March 2011 to August 2015 include the workers who used to be the “workers expected to work under especially high radiation” as well.

*3 The value of the exposure doses and the number of the workers in the table above are subject to change due to the replacement of APD data with monthly dose data measured by integral dosimeters or the update of the dose data of the workers who wear only integral dosimeters (ex., the workers who enter only the Main Anti-earthquake Building) after the publication.

*4 The total numbers in the dose range “Above 100mSv” from March 2011 to August 2015 have been updated because the March 2011 data of internal exposure were reexamined in July 2015.

4. Equivalent Dose

Table 5 and Table 6 show equivalent doses to the skin and the lens of the eye of the workers, respectively, who were involved in radiation work at the Fukushima Daiichi Nuclear Power Station from June 2015 to August 2015.

Table 5 (Equivalent dose to the skin)

Dose Range (mSv)	June 2015			July 2015			August 2015		
	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total
Above 500	0	0	0	0	0	0	0	0	0
300-500	0	0	0	0	0	0	0	0	0
250-300	0	0	0	0	0	0	0	0	0
200-250	0	0	0	0	0	0	0	0	0
150-200	0	0	0	0	0	0	0	0	0
100-150	0	1	1	0	0	0	0	0	0
75-100	0	0	0	0	0	0	0	0	0
50-75	0	0	0	0	1	1	0	0	0
20-50	0	2	2	0	8	8	0	0	0
10-20	0	37	37	0	45	45	0	8	8
5-10	3	333	336	2	334	336	0	92	92
1-5	70	2081	2151	62	1891	1953	51	1141	1192
1 or less	1119	7647	8766	1109	7648	8757	980	8082	9062
Total	1192	10101	11293	1173	9927	11100	1031	9323	10354
Maximum (mSv)	9.50	125.90	125.90	6.40	68.00	68.00	3.38	16.60	16.60
Average (mSv)	0.29	0.98	0.90	0.28	0.96	0.89	0.18	0.49	0.46

*The value of the exposure doses and the number of the workers in the table above are subject to change due to the replacement of APD data with monthly dose data measured by integral dosimeters or the update of the dose data of the workers who wear only integral dosimeters (ex., the workers who enter only the Main Anti-earthquake Building) after the publication.

*An equivalent dose is a measure of the radiation doses of internal organs and tissues, and the equivalent dose limit to the skin is 500mSv/year (the emergency exposure dose limit is 1Sv).

*The equivalent dose to the skin is evaluated as 70 μ mSv. The maximum value is counted as the equivalent dose when the exposure dose of the chest, the abdomen, and the hands.

Table 6 (Equivalent dose to the lens of the eye)

Dose Range (mSv)	June 2015			July 2015			August 2015		
	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total
Above 150	0	0	0	0	0	0	0	0	0
100-150	0	0	0	0	0	0	0	0	0
75-100	0	0	0	0	0	0	0	0	0
50-75	0	0	0	0	0	0	0	0	0
20-50	0	0	0	0	0	0	0	0	0
10-20	0	14	14	0	11	11	0	8	8
5-10	0	254	254	1	234	235	0	92	92
1-5	67	1912	1979	57	1772	1829	51	1141	1192
1 or less	1125	7921	9046	1115	7910	9025	980	8082	9062
Total	1192	10101	11293	1173	9927	11100	1031	9323	10354
Maximum (mSv)	3.90	11.50	11.50	5.10	18.60	18.60	3.38	16.60	16.60
Average (mSv)	0.26	0.83	0.77	0.26	0.79	0.73	0.18	0.49	0.46

*The value of the exposure doses and the number of the workers in the table above are subject to change due to the replacement of APD data with monthly dose data measured by integral dosimeters or the update of the dose data of the workers who wear only integral dosimeters (ex., the workers who enter only the Main Anti-earthquake Building) after the publication.

*An equivalent dose is a measure of the radiation doses of internal organs and tissues, and the equivalent dose limit to the lens of the eye is 150mSv/year (the emergency exposure dose limit is 300mSv).

*The equivalent dose to the lens of the eye is evaluated as 70 μ mSv using a dosimeter put on around the chest or the abdomen, and thus the shielding by a face mask does not affect the measurement results.

5. Cumulative Data of Equivalent Doses

Table 7 and Table 8 compares the cumulative dose distributions of equivalent doses to the skin and the lens of the eye of the workers, respectively, who were involved in radiation work at the Fukushima Daiichi Nuclear Power Station in the two different periods of time: from April 2015 to July 2015 and from April 2015 to August 2015.

Table 7 (Equivalent dose to the skin)

Dose Range (mSv)	April 2015 - July 2015			April 2015 - August 2015			Difference		
	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total
Above 500	0	0	0	0	0	0	0	0	0
300-500	0	0	0	0	0	0	0	0	0
250-300	0	0	0	0	0	0	0	0	0
200-250	0	0	0	0	0	0	0	0	0
150-200	0	0	0	0	0	0	0	0	0
100-150	0	2	2	0	3	3	0	1	1
75-100	0	2	2	0	2	2	0	0	0
50-75	0	2	2	0	1	1	0	-1	-1
20-50	1	204	205	1	292	293	0	88	88
10-20	5	977	982	10	1065	1075	5	88	93
5-10	33	1382	1415	43	1477	1520	10	95	105
1-5	286	3613	3899	314	3888	4202	28	275	303
1 or less	1133	6827	7960	1128	6756	7884	-5	-71	-76
Total	1458	13009	14467	1496	13484	14980	38	475	513
Maximum (mSv)	26.00	136.80	136.80	26.66	136.84	136.84	-	-	-
Average (mSv)	0.89	3.11	2.88	0.99	3.34	3.10	-	-	-

*The value of the exposure doses and the number of the workers in the table above are subject to change due to the replacement of APD data with monthly dose data measured by integral dosimeters or the update of the dose data of the workers who wear only integral dosimeters (ex.,

the workers who enter only the Main Anti-earthquake Building) after the publication.

Table 8 (Equivalent dose to the lens of the eye)

Dose Range (mSv)	April 2015 - July 2015			April 2015 - August 2015			Difference		
	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total	TEPCO's Employees	Contractors	Total
Above 150	0	0	0	0	0	0	0	0	0
100-150	0	0	0	0	0	0	0	0	0
75-100	0	0	0	0	0	0	0	0	0
50-75	0	0	0	0	0	0	0	0	0
20-50	0	137	137	0	195	195	0	58	58
10-20	2	747	749	8	875	883	6	128	134
5-10	32	1339	1371	40	1466	1506	8	127	135
1-5	267	3812	4079	295	4062	4357	28	250	278
1 or less	1157	6974	8131	1153	6886	8039	-4	-88	-92
Total	1458	13009	14467	1496	13484	14980	38	475	513
Maximum (mSv)	13.40	45.80	45.80	14.06	47.46	47.46	-	-	-
Average (mSv)	0.81	2.68	2.49	0.92	2.92	2.72	-	-	-

*The value of the exposure doses and the number of the workers in the table above are subject to change due to the replacement of APD data with monthly dose data measured by integral dosimeters or the update of the dose data of the workers who wear only integral dosimeters (ex., the workers who enter only the Main Anti-earthquake Building) after the publication.