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

(Updated on 31 March 2014)

1 Number of Workers (Later than 11 March 2011)

		Persons	Increase	Emergency workers(*)	Updated on
Total Workers		32,546	530	19,346	As of 28
	TEPCO	4,120	18	3,391	February, 2014
	Contractors	28,426	512	15,955	(Obtained on 31

^(*) As of the end of December 2011; Targeted workers are now being identified by closely examining the database.

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)

Eff. 4: 1 (E)	Jan-14			Feb-14					
Effective dose (E)	Dec-13			Jan-14			Feb-14		
mSv	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100 <e< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<>	0	0	0	0	0	0	0	0	0
75 <e<=100< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<=100<>	0	0	0	0	0	0	0	0	0
50 <e<=75< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<=75<>	0	0	0	0	0	0	0	0	0
20 <e<=50< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<=50<>	0	0	0	0	0	0	0	0	0
10 <e<=20< td=""><td>0</td><td>23</td><td>23</td><td>0</td><td>53</td><td>53</td><td>0</td><td>24</td><td>24</td></e<=20<>	0	23	23	0	53	53	0	24	24
5 <e<=10< td=""><td>2</td><td>199</td><td>201</td><td>0</td><td>221</td><td>221</td><td>4</td><td>152</td><td>156</td></e<=10<>	2	199	201	0	221	221	4	152	156
1 <e<=5< td=""><td>116</td><td>1,627</td><td>1,743</td><td>84</td><td>1,505</td><td>1,589</td><td>45</td><td>1,547</td><td>1,592</td></e<=5<>	116	1,627	1,743	84	1,505	1,589	45	1,547	1,592
E<= 1	968	3,852	4,820	997	4,112	5,109	879	4,625	5,504
Total	1,086	5,701	6,787	1,081	5,891	6,972	928	6,348	7,276
Maximum (mSv)	5.40	16.81	16.81	4.50	15.80	15.80	5.99	16.70	16.70
Average (mSv)	0.44	1.13	1.02	0.37	1.16	1.04	0.30	0.96	0.88

^(*) 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

(2) Combined Cumulative Effective Dose from March 2011 (Internal and External)

Effective dose (E)	Effective dose (E) March 2011-January 2014			March 2011-February 2014			Difference		
mSv	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
250 <e< td=""><td>6</td><td>0</td><td>6</td><td>6</td><td>0</td><td>6</td><td>0</td><td>0</td><td>0</td></e<>	6	0	6	6	0	6	0	0	0
200 <e<=250< td=""><td>1</td><td>2</td><td>3</td><td>1</td><td>2</td><td>3</td><td>0</td><td>0</td><td>0</td></e<=250<>	1	2	3	1	2	3	0	0	0
150 <e<=200< td=""><td>24</td><td>2</td><td>26</td><td>24</td><td>2</td><td>26</td><td>0</td><td>0</td><td>0</td></e<=200<>	24	2	26	24	2	26	0	0	0
100 <e<=150< td=""><td>118</td><td>20</td><td>138</td><td>118</td><td>20</td><td>138</td><td>0</td><td>0</td><td>0</td></e<=150<>	118	20	138	118	20	138	0	0	0
75 <e<=100< td=""><td>259</td><td>119</td><td>378</td><td>262</td><td>121</td><td>383</td><td>3</td><td>2</td><td>5</td></e<=100<>	259	119	378	262	121	383	3	2	5
50 <e<=75< td=""><td>324</td><td>880</td><td>1,204</td><td>322</td><td>910</td><td>1,232</td><td>-2</td><td>30</td><td>28</td></e<=75<>	324	880	1,204	322	910	1,232	-2	30	28
20 <e<=50< td=""><td>610</td><td>4,302</td><td>4,912</td><td>613</td><td>4,365</td><td>4,978</td><td>3</td><td>63</td><td>66</td></e<=50<>	610	4,302	4,912	613	4,365	4,978	3	63	66
10 <e<=20< td=""><td>545</td><td>3,954</td><td>4,499</td><td>545</td><td>4,069</td><td>4,614</td><td>0</td><td>115</td><td>115</td></e<=20<>	545	3,954	4,499	545	4,069	4,614	0	115	115
5 <e<=10< td=""><td>432</td><td>3,788</td><td>4,220</td><td>438</td><td>3,816</td><td>4,254</td><td>6</td><td>28</td><td>34</td></e<=10<>	432	3,788	4,220	438	3,816	4,254	6	28	34
1 <e<=5< td=""><td>722</td><td>6,961</td><td>7,683</td><td>724</td><td>7,093</td><td>7,817</td><td>2</td><td>132</td><td>134</td></e<=5<>	722	6,961	7,683	724	7,093	7,817	2	132	134
E<= 1	1,061	7,886	8,947	1,067	8,028	9,095	6	142	148
Total	4,102	27,914	32,016	4,120	28,426	32,546	18	512	530
Maximum (mSv)	678.80	238.42	678.80	678.80	238.42	678.80	-	-	-
Average (mSv)	23.63	11.00	12.61	23.59	11.01	12.61	-	-	-

- (*) The number of new comers in February 2014 was 530.
- (*) There has been no significant internal exposure reported since October 2011.
- (*) Effective doses have been changed due to the re-evaluation of committed doses, etc.
- (*) 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

(*) Not reflecting the results of the re-evaluation based on Public Notice (Kianhatsu-0325) No. 1 "Thorough Control of Internal Exposure at TEPCO's Fukushima Daiichi NPP" (dated 25 March, 2014)

(3) Combined Cumulative Effective Dose from April 2013 (Internal and External)

Effective dose (E) April 2013-January 2014			April 2013-February 2014			Difference			
mSv	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100 <e< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<>	0	0	0	0	0	0	0	0	0
75 <e<=100< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<=100<>	0	0	0	0	0	0	0	0	0
50 <e<=75< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<=75<>	0	0	0	0	0	0	0	0	0
20 <e<=50< td=""><td>25</td><td>471</td><td>496</td><td>26</td><td>542</td><td>568</td><td>1</td><td>71</td><td>72</td></e<=50<>	25	471	496	26	542	568	1	71	72
10 <e<=20< td=""><td>63</td><td>1,611</td><td>1,674</td><td>75</td><td>1,829</td><td>1,904</td><td>12</td><td>218</td><td>230</td></e<=20<>	63	1,611	1,674	75	1,829	1,904	12	218	230
5 <e<=10< td=""><td>175</td><td>1,708</td><td>1,883</td><td>188</td><td>1,762</td><td>1,950</td><td>13</td><td>54</td><td>67</td></e<=10<>	175	1,708	1,883	188	1,762	1,950	13	54	67
1 <e<=5< td=""><td>665</td><td>3,420</td><td>4,085</td><td>663</td><td>3,570</td><td>4,233</td><td>-2</td><td>150</td><td>148</td></e<=5<>	665	3,420	4,085	663	3,570	4,233	-2	150	148
E<= 1	712	4,309	5,021	718	4,477	5,195	6	168	174
Total	1,640	11,519	13,159	1,670	12,180	13,850	30	661	691
Maximum (mSv)	37.00	40.03	40.03	38.77	40.03	40.03	-	-	-
Average (mSv)	2.88	5.02	4.76	3.00	5.25	4.98	-	-	-

^(*) 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

(4) Combined Cumulative Effective Dose of Workers to Whom Emergency Dose Limits Apply*

Effective dose (E) mSv	Dec-13	Jan-14	Feb-14	March 2011-February 2014
100 <e< td=""><td>0</td><td>0</td><td>0</td><td>1</td></e<>	0	0	0	1
75 <e<=100< td=""><td>0</td><td>0</td><td>0</td><td>153</td></e<=100<>	0	0	0	153
50 <e<=75< td=""><td>0</td><td>0</td><td>0</td><td>213</td></e<=75<>	0	0	0	213
20 <e<=50< td=""><td>0</td><td>0</td><td>0</td><td>237</td></e<=50<>	0	0	0	237
10 <e<=20< td=""><td>0</td><td>0</td><td>0</td><td>127</td></e<=20<>	0	0	0	127
5 <e<=10< td=""><td>2</td><td>0</td><td>1</td><td>96</td></e<=10<>	2	0	1	96
1 <e<=5< td=""><td>106</td><td>77</td><td>40</td><td>131</td></e<=5<>	106	77	40	131
E<= 1	520	555	528	44
Total	628	632	569	1,002
Maximum (mSv)	5.40	4.50	5.36	102.69
Average (mSv)	0.60	0.50	0.33	37.40

- (*) 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 February 2014 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
- (*) The results of re-evaluating committed doses in March 2011 reveal that maximum cumulative effective doses for the period between March 2011 and February 2014 exceeded 100.
- (*) Not reflecting the results of the re-evaluation based on Public Notice (Kianhatsu-0325) No. 1 "Thorough Control of Internal Exposure at TEPCO's Fukushima Daiichi NPP" (dated 25 March, 2014)