<Reference>
September 13, 2013
Tokyo Electric Power Company

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (1/4)
Underground Water Obtained at Bank Protection

Unit: Bq/L

		Underground water observation hole No.0-1	Underground water observation hole No.0-2	Underground water observation hole No.1	Underground water observation hole No.1-2	Underground water observation hole No.1-3	Underground water observation hole No.1-5	Underground water observation hole No.1-8	Underground water observation hole No.1-9	Groundwater pumped up from the well point	Underground water observation hole No.2	Underground water observation hole No.2-1	Underground water observation hole No.3	Underground water observation hole No.3-4
Date of sampling		Sep 8, 2013	Sep 8, 2013	Sep 9, 2013	Sep 9, 2013			Sep 9, 2013	Sep 10, 2013	Sep 9, 2013				
Time of sampling		12:02 PM	12:35 PM	10:51 AM	1:37 PM			10:15 AM	6:20 AM	1:30 PM				
Chloride (unit: ppm)		–	–	–	–			–	370	–				
Cs-134 (Approx. 2 years)		0.92	ND(0.46)	ND（0.40）	54			17	33	ND(0.63)				
Cs-137 (Approx.30 years)		2.4	0.67	0.72	110			37	77	ND(0.68)				
The other γ	Ru-106 (Approx. 370 days)	ND	ND	12	ND			ND	ND	9.0				
All β		79	ND(17)	650	460,000			370	200	89,000				
H-3 (Approx. 12 years)		30,000	ND(130)	350,000	280,000			1,200	380	220,000				
Sr-90 (Approx. 29 years)		-	-	-	-			-	-	-				

* Data announced this time is provided in a thick-frame. The other data was announced on September 9, 10 and 11.
* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.
* "-" indicates that the measurement was out of range.

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (2/4)
Underground Water Obtained at Bank Protection

Unit: Bq/L

		Underground water observation hole No.0-1	Underground water observation hole No.0-2	Underground water observation hole No.1	Underground water observation hole No.1-2	Underground water observation hole No.1-3	Underground water observation hole No.1-5	Underground water observation hole No.1-8	Underground water observation hole No.1-9	Groundwater pumped up from the well point	Underground water observation hole No.2	Underground water observation hole No.2-1	Underground water observation hole No.3	Underground water observation hole No.3-4
Date of sampling				Sep 12, 2013	Sep 12, 2013				Sep 12, 2013					
Time of sampling				9:30 AM	9:58 AM				6:55 AM					
Chloride (unit: ppm)				—	—				360					
Cs-134 (Approx. 2 years)				ND(0.46)	110				8.7					
Cs-137 (Approx.30 years)				ND(0.58)	270				20					
The other γ	Ru-106 (Approx. 370 days)			6.5	ND				ND					
All β				1,000	430,000				270					
H-3 (Approx. 12 years)				Under analysis	Under analysis				Under analysis					
Sr-90 (Approx. 29 years)				-	-				-					

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.
* "-" indicates that the measurement was out of range.

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (3/4)
Seawater

Unit: Bq/L

	1F, North side of Unit 5,6 discharge channel	1F, In front of Unit 6 water intake channel	1F, In front of shallow draft quay	1F, North side of Unit 1-4 water intake channel	1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)	1F, Unit 1 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 1 and Unit 2 (surface layer)	1F, Between the water intake channel of Unit 1 and Unit 2 (lower layer)	1F, Unit 2 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 2 and Unit 3	1F, Unit 3 Screen (Inside the Silt Fence)
Date of Sampling	Sep 9, 2013	Sep 9, 2013	Sep 9, 2013	Sep 10, 2013	Sep 9, 2013	Sep 9, 2013	Sep 10, 2013	Sep 10, 2013	Sep 9, 2013	Sep 9, 2013	Sep 9, 2013
Time of sampling	6:05 AM	5:55 AM	5:50 AM	6:06 AM	6:31 AM	6:01 AM	6:16 AM	6:16 AM	6:05 AM	6:11 AM	6:15 AM
Cs-134(Approx. 2 years)	ND(1.1)	ND(2.3)	2.3	54	12	31	39	11	25	19	21
Cs-137(Approx.30 years)	ND(1.1)	ND(2.7)	4.5	110	19	68	80	24	49	38	38
All β	ND(16)	ND(17)	ND(17)	880	250	550	690	310	520	450	270
H-3 (Approx. 12 years)	ND(1.8)	4.0	ND(110)	3,400	240	1400	1,900	470	1500	790	270
Sr-90 (Approx. 29 years)	-	-	-	-	-	-	-	-	-	-	-

Unit: Bq/L

	1F, Between the water intake channel of Unit 3 and Unit 4	1F, Unit 4 Screen (Inside the Silt Fence)	1F, Around the south discharge channel	1F, Port entrance	1F, East side in the port	1F, West side in the port	1F, North side in the port	1F, South side in the port	North side of the north breakwater*	East side of the port entrance*	South side of the south breakwater*
Date of Sampling	Sep 9, 2013	Sep 9, 2013	Sep 9, 2013								
Time of sampling	6:20 AM	6:18 AM	5:20 AM								
Cs-134(Approx. 2 years)	14	21	ND(1.3)								
Cs-137(Approx.30 years)	36	45	ND(1.5)								
All β	280	210	ND(15)								
H-3 (Approx. 12 years)	410	220	ND(1.8)								
Sr-90 (Approx. 29 years)	-	-	-								

* Data announced this time is provided in a thick-frame. The other data was announced on September 10 and 11.

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

* "-" indicates that the measurement was out of range.

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (4/4)
Seawater

Unit: Bq/L

	1F, North side of Unit 5,6 discharge channel	1F, In front of Unit 6 water intake channel	1F, In front of shallow draft quay	1F, North side of Unit 1-4 water intake channel	1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)	1F, Unit 1 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 1 and Unit 2 (surface layer)	1F, Between the water intake channel of Unit 1 and Unit 2 (lower layer)	1F, Unit 2 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 2 and Unit 3	1F, Unit 3 Screen (Inside the Silt Fence)
Date of Sampling				Sep 12, 2013			Sep 12, 2013	Sep 12, 2013			
Time of sampling				6:32 AM			6:50 AM	6:50 AM			
Cs-134(Approx. 2 years)				33			24	12			
Cs-137(Approx.30 years)				65			45	23			
All β				690			360	360			
H-3 (Approx. 12 years)				Under analysis			Under analysis	Under analysis			
Sr-90 (Approx. 29 years)				-			-	-			

Unit: Bq/L

	1F, Between the water intake channel of Unit 3 and Unit 4	1F, Unit 4 Screen (Inside the Silt Fence)	1F, Around the south discharge channel	1F, Port entrance	1F, East side in the port	1F, West side in the port	1F, North side in the port	1F, South side in the port	North side of the north breakwater*	East side of the port entrance*	South side of the south breakwater*
Date of Sampling									Sep 11, 2013	Sep 11, 2013	Sep 11, 2013
Time of sampling									9:16 AM	8:59 AM	9:06 AM
Cs-134(Approx. 2 years)									ND(0.70)	ND(0.80)	ND(0.74)
Cs-137(Approx.30 years)									ND(0.62)	ND(0.71)	ND(0.64)
All β									ND(17)	ND(17)	ND(17)
H-3 (Approx. 12 years)									Under analysis	Under analysis	Under analysis
Sr-90 (Approx. 29 years)									-	-	-

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.
* "-" indicates that the measurement was out of range.

<Reference> The Highest Dose Until the Previous Measurement (Groundwater Obtained at Bank Protection)

Unit: Bq/L

		Groundwater observation hole No.0-1	Groundwater observation hole No.0-2	Groundwater observation hole No.1	Groundwater observation hole No.1-1	Groundwater observation hole No.1-2	Groundwater observation hole No.1-3	Groundwater observation hole No.1-4	Groundwater observation hole No.1-5	Groundwater observation hole No.1-8	Groundwater observation hole No.1-9	Groundwater pumped up from the well point (notch tank)
Cs-134 (Approx. 2 years)		1.4 〔8/29〕	ND	13 〔8/29〕	1.9 〔7/8〕	11,000 〔7/9〕	10 〔9/2〕	1.5 〔7/8〕	310 〔8/5〕	30 〔9/2〕	170 〔9/3〕	1.5 〔8/19〕
Cs-137 (Approx.30 years)		3.0 〔8/29〕	0.75 〔9/2〕	31 〔8/29〕	3.6 〔7/8〕	22,000 〔7/9〕	24 〔9/2〕	3.6 〔7/8〕	650 〔8/5〕	63 〔9/2〕	380 〔9/3〕	3.4 〔8/19〕
The other γ	Ru-106 (Approx. 370 days)	ND	ND	26 〔5/24〕	7.9 〔7/8〕	160 〔8/15〕	17 〔7/22〕〔8/8〕	3.1 〔8/8〕	ND	ND	ND	25 〔9/2〕
	Mn-54 (Approx. 310 days)	ND	ND	ND	1.0 〔7/5〕	62 〔7/5〕	ND	ND	ND	0.52 〔8/26〕	ND	ND
	Co-60 (Approx. 5 years)	ND	ND	0.50 〔7/19〕	ND	3.1 〔7/8〕	ND	ND	ND	ND	ND	ND
	Sb-125 (Approx. 3 years)	ND	ND	1.7 〔7/11〕	ND	250 〔7/15〕	1.4 〔7/12〕〔8/26〕	ND	12 〔8/8〕	ND	ND	ND
All β		300 〔8/22〕	ND	1,900 〔5/24〕	4,400 〔7/8〕	900,000 〔7/5〕〔7/9〕	160,000 〔8/12〕〔8/15〕	380 〔8/19〕	56,000 〔8/5〕	1,200 〔8/26〕	600 〔9/8〕	360,000 〔9/2〕
H-3 (Approx. 12 years)		45,000 〔8/29〕	ND	500,000 〔5/24〕〔6/7〕	630,000 〔7/8〕	400,000 〔8/22〕	290,000 〔7/12〕	98,000 〔7/11〕	72,000 〔8/15〕	1100 〔9/2〕	670 〔9/3〕	460,000 〔8/19〕
Sr-90(Approx. 29 years)		Under analysis	Under analysis	1,200 〔6/7〕	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	-

Unit: Bq/L

		Groundwater observation hole No.2	Groundwater observation hole No.2-1	Groundwater observation hole No.3	Groundwater observation hole No.3-1	Groundwater observation hole No.3-4
Cs-134 (Approx. 2 years)		0.50 〔7/9〕	0.66 〔9/1〕	3.5 〔7/25〕	1.2 〔7/25〕〔8/8〕	0.52 〔9/12〕
Cs-137 (Approx.30 years)		1.2 〔7/11〕〔8/1〕	1.1 〔8/29〕〔9/1〕	5.9 〔8/8〕	2.6 〔8/1〕	1.3 〔9/12〕
The other γ	Ru-106 (Approx. 370 days)	ND	ND	ND	ND	ND
	Mn-54 (Approx. 310 days)	ND	ND	ND	ND	ND
	Co-60 (Approx. 5 years)	ND	ND	ND	ND	ND
	Sb-125 (Approx. 3 years)	ND	ND	1.1 〔9/5〕	ND	ND
All β		1,700 〔7/8〕	380 〔7/29〕	1,400 〔7/11〕	180 〔8/1〕	ND 〔9/12〕
H-3 (Approx. 12 years)		850 〔6/26〕	440 〔8/26〕	3,200 〔2012/12/12〕	460 〔8/1〕	Under analysis
Sr-90(Approx. 29 years)		54 〔5/31〕	Under analysis	8.3 〔2012/12/12〕	Under analysis	Under analysis

* "ND" indicates that the measurement result is below the detection limit.
* Date of sampling is provided in parentheses.

<Reference> The Highest Dose Until the Previous Measurement* (Seawater)

Unit: Bq/L

	1F, North side of Unit 5,6 discharge channel		1F, In front of Unit 6 water intake channel		1F, In front of shallow draft quay		1F, North side of Unit 1-4 water intake channel		1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)		1F, Unit 1 Screen (Inside the Silt Fence)		1F, Between the water intake channel of Unit 1 and Unit 2 (surface layer)		1F, Between the water intake channel of Unit 1 and Unit 2 (lower layer)		1F, Unit 2 Screen (Inside the Silt Fence)		1F, Between the water intake channel of Unit 2 and Unit 3 (surface layer)		1F, Between the water intake channel of Unit 2 and Unit 3 (lower layer)		1F, Unit 3 Screen (Inside the Silt Fence)	
Cs-134(Approx. 2 years)	1.8	(6/21)	2.4	(8/19)	5.3	(8/5)	54	(9/10)	16	(8/12)	24	(8/12) (8/19)	39	(9/10)	13	(8/29)	26	(8/19)	21	(8/12)	3.5	(8/20)	350	(7/15)
Cs-137(Approx.30 years)	3.3	(6/26)	4.7	(8/19)	8.6	(8/5)	110	(9/10)	33	(8/12)	51	(8/12)	80	(9/10)	25	(8/29)	52	(8/19)	38	(9/9)	9.8	(8/20)	770	(7/15)
All β	ND		46	(8/19)	40	(7/3)	1,100	(8/15)	320	(8/12)	700	(8/12)	740	(8/15)	450	(7/16)	520	(9/9)	450	(9/9)	85	(8/20)	1,000	(7/15)
H-3 (Approx. 12 years)	8.6	(6/26)	24	(8/19)	340	(6/26)	4,700	(8/15)	460	(7/15)	2,500	(8/12)	2,600	(8/15)	1,600	(9/1)	820	(8/19)	720	(8/12)	-		410	(9/2)
Sr-90 (Approx. 29 years)	5.8	(6/26)	-		7.4	(6/26)	Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		-		Under analysis	

Unit: Bq/L

	1F, Between the water intake channel of Unit 3 and Unit 4 (surface layer)		1F, Between the water intake channel of Unit 3 and Unit 4 (lower layer)		1F, Unit 4 Screen (Inside the Silt Fence)		1F, Around the south discharge channel		1F, Port entrance		1F, East side in the port		1F, West side in the port		1F, North side in the port		1F, South side in the port		North side of the north breakwater		East side of the port entrance		South side of the south breakwater	
Cs-134(Approx. 2 years)	22	(8/12)	4.8	(8/20)	46	(7/8)	ND		1.6	(8/19)	2.9	(8/19)	2.6	(8/19)	ND		2.1	(8/19)	ND		ND		ND	
Cs-137(Approx.30 years)	45	(8/12)	7.7	(8/20)	93	(7/8)	3.0	(7/15)	4.7	(8/19)	6.6	(8/19)	6.5	(8/19)	4.7	(8/19)	4.6	(8/19)	ND		ND		ND	
All β	390	(8/12)	57	(8/20)	310	(8/12)	ND		69	(8/19)	74	(8/19)	60	(7/4)	69	(8/19)	79	(8/19)	ND		ND		ND	
H-3 (Approx. 12 years)	650	(8/12)	-		400	(8/12)	ND		68	(8/19)	67	(8/19)	59	(8/19)	52	(8/19)	60	(8/19)	4.7	(8/14)	ND		ND	
Sr-90 (Approx. 29 years)	Under analysis		-		Under analysis		0.36	(6/26)	3.5	(6/20)	Under analysis		Under analysis		-		-		-		-		-	

* The highest result announced in "Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection" or the other handouts is provided.
As for "1F, North side of Unit 1-4 water intake channel", the data is obtained since January 14, 2013. For the other locations, the data is obtained since June 14.

* "ND" indicates that the measurement result is below the detection limit.

* Date of sampling is provided in parentheses.

* "-" indicates that the measurement was out of range.