<Reference>
September 18, 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 (exclude chloride)

	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	Underground water observation hole No.1-11	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 11, 2013			
Time of sampling								6:55 AM			9:27 AM			
Chloride (unit: ppm)								360			-			
Cs-134 (Approx. 2 years)								8.7			0.36			
Cs-137 (Approx.30 years)								20			0.64			
The other γ														
The other γ														
The other γ														
All β								270			96			
H-3 (Approx. 12 years)								650			520			
Sr-90 (Approx. 29 years)								-	Under analysis		-			

* Data announced this time is provided in a thick-frame. The other data was announced on September 12 and 13.
* "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 (exclude chloride)

	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	Underground water observation hole No.1-11	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 15, 2013	Sep 15, 2013						Sep 15, 2013			Sep 15, 2013			
Time of sampling	9:52 AM	10:32 AM						6:06 AM			11:05 AM			
Chloride (unit: ppm)	-	-						355			-			
Cs-134 (Approx. 2 years)	1.7	ND（0.42）						45			ND（0.36）			
Cs-137 (Approx.30 years)	4.4	0.93						100			0.85			
The other γ														
The other γ														
The other γ														
All β	170	19						350			140			
H-3 (Approx. 12 years)	Under analysis	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 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)				2,800			1,500	400			
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											
Time of sampling											
Cs-134(Approx. 2 years)											
Cs-137(Approx.30 years)											
All β											
H-3 (Approx. 12 years)											
Sr-90 (Approx. 29 years)											

* Data announced this time is provided in a thick-frame. The other data was announced on September 13.
* "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 15, 2013			Sep 15, 2013	Sep 15, 2013			
Time of sampling				5:56 AM			6:02 AM	6:02 AM			
Cs-134(Approx. 2 years)				27			22	11			
Cs-137(Approx.30 years)				66			47	23			
All β				400			320	190			
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											
Time of sampling											
Cs-134(Approx. 2 years)											
Cs-137(Approx.30 years)											
All β											
H-3 (Approx. 12 years)											
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 observation hole No.1-11	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〕	ND	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〕	0.48 〔9/13〕	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	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	ND
	Co-60 (Approx. 5 years)	ND	ND	0.50 〔7/19〕	ND	3.1 〔7/8〕	ND	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	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〕	43 〔9/13〕	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〕	1200 〔9/9〕	670 〔9/3〕	85000 〔9/13〕	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	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
H-3 (Approx. 12 years)		850 〔6/26〕	440 〔8/26〕	3,200 〔2012/12/12〕	460 〔8/1〕	ND
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)	1,500	(9/9)	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.