# <Reference> September 19, 2012 Tokyo Electric Power Company

# Nuclide Analysis Results of Fish and Shellfish (The Ocean Area Within 20km Radius of Fukushima Daiichi NPS) < 1/10 >

(Data summarized on September 19)

Name of Sample	Place of Sampling		Radioactivity Density [E (Half-life)		
(Region)	( Place No. )	Date of Sampling	Cs-134 (Approx. 2 years)	Cs-137 (Approx. 30 years)	Total
Greenling (Muscle) No.1	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	35	61	96
Greenling (Muscle) No.2	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	29	43	72
Greenling (Muscle) No.3	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	56	100	156
Greenling (Muscle) No.4	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	95	130	225
Greenling (Muscle) No.5	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	56	95	151
Greenling (Muscle) No.6	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	16	30	46
Greenling (Muscle) No.7	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	22	34	56
Greenling (Muscle) No.8	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	26	40	66
Greenling (Muscle) No.9	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	27	40	67
Greenling (Muscle) No.10	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	38	51	89

\* Standard Value (after April 1, 2012) Cs-134+Cs-137: 100Bq/kg

# Nuclide Analysis Results of Fish and Shellfish (The Ocean Area Within 20km Radius of Fukushima Daiichi NPS) < 2/10 >

(Data summarized on September 19)

Name of Sample (Region)	Place of Sampling		Radioactivity Density [Bq/kg (Raw)] (Half-life)		
	( Place No. )	Date of Sampling	Cs-134 (Approx. 2 years)	Cs-137 (Approx. 30 years)	Total
Greenling (Muscle) No.11	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	29	53	82
Greenling (Muscle) No.12	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	22	55	77
Greenling (Muscle) No.13	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	22	36	58
Greenling (Muscle) No.14	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	5.1	13	18.1
Greenling (Muscle) No.15	Around 1km Offshore of Ota River (T-S1)	August 29, 2012	24	43	67
Greenling (Muscle) No.16	Around 1km Offshore of Ota River (T-S1)	August 30, 2012	55	96	151
Greenling (Muscle) No.17	Around 1km Offshore of Ota River (T-S1)	August 30, 2012	48	100	148
Greenling (Muscle) No.18	Around 1km Offshore of Ota River (T-S1)	August 30, 2012	39	77	116
Greenling (Muscle) No.19	Around 1km Offshore of Ota River (T-S1)	August 30, 2012	37	62	99
Greenling (Muscle) No.20	Around 1km Offshore of Ota River (T-S1)	August 30, 2012	22	41	63

\* Standard Value (after April 1, 2012) Cs-134+Cs-137: 100Bq/kg

## Nuclide Analysis Results of Fish and Shellfish (The Ocean Area Within 20km Radius of Fukushima Daiichi NPS) < 3/10 >

(Data summarized on September 19)

Name of Sample (Region)	Place of Sampling		Radioactivity Density [Bq/kg (Raw)] (Half-life)		
	( Place No. )	Date of Sampling	Cs-134 (Approx. 2 years)	Cs-137 (Approx. 30 years)	Total
Greenling (Muscle) No.21	Around 1km Offshore of Ota River (T-S1)	August 30, 2012	62	110	172
Greenling (Muscle) No.22	Around 1km Offshore of Ota River (T-S1)	August 30, 2012	25	37	62
Greenling (Muscle) No.23	Around 1km Offshore of Ota River (T-S1)	August 30, 2012	26	33	59
Greenling (Muscle) No.24	Around 1km Offshore of Ota River (T-S1)	September 4, 2012	53	110	163
Greenling (Muscle) No.25	Around 1km Offshore of Ota River (T-S1)	September 4, 2012	38	74	112
Greenling (Muscle) No.26	Around 1km Offshore of Ota River (T-S1)	September 4, 2012	54	90	144
Greenling (Muscle) No.27	Around 1km Offshore of Ota River (T-S1)	September 4, 2012	25	42	67
Greenling (Muscle) No.28	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	480	870	1350
Greenling (Muscle) No.29	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	60	91	151
Greenling (Muscle) No.30	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	16	24	40

\* Standard Value (after April 1, 2012) Cs-134+Cs-137: 100Bq/kg

#### Nuclide Analysis Results of Fish and Shellfish (The Ocean Area Within 20km Radius of Fukushima Daiichi NPS) < 4/10 >

(Data summarized on September 19)

Name of Sample (Region)	Place of Sampling		Radioactivity Density [Bq/kg (Raw)] (Half-life)		
	(Place No.)	Date of Sampling	Cs-134 (Approx. 2 years)	Cs-137 (Approx. 30 years)	Total
Greenling (Muscle) No.31	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	16	23	39
Greenling (Muscle) No.32	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	ND	ND	ND
Greenling (Muscle) No.33	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	50	83	133
Greenling (Muscle) No.34	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	78	110	188
Greenling (Muscle) No.35	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	35	59	94
Greenling (Muscle) No.36	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	11	15	26
Greenling (Muscle) No.37	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	ND	11	11
Stingray (Muscle)	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	55	91	146
Blue crab (Whole)	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	4.0	10	14
Angel shark (Muscle)	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	46	80	126

\* When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows.

Cs-134: Approx. 8.7Bq/kg (Raw), Cs-137: Approx. 8.7Bq/kg (Raw)

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

\* Standard Value (after April 1, 2012) Cs-134+Cs-137: 100Bq/kg

#### Nuclide Analysis Results of Fish and Shellfish (The Ocean Area Within 20km Radius of Fukushima Daiichi NPS) < 5/10 >

(Data summarized on September 19)

Name of Sample	Place of Sampling		Radioactivity Density [Bq/kg (Raw)] (Half-life)		
(Region)	(Place No.)	Date of Sampling	Cs-134 (Approx. 2 years)	Cs-137 (Approx. 30 years)	Total
Common Skete (Muscle)	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	94	150	244
Drumfish (Muscle)	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	15	23	38
Flatfish (Muscle)	Around 1km Offshore of Ota River (T-S1)	September 5, 2012	25	40	65
Blue crab (Whole)	Around 3km Offshore of Odaka Ward (T-S2)	September 5, 2012	ND	ND	ND
Common Skete (Muscle)	Around 3km Offshore of Odaka Ward (T-S2)	September 5, 2012	75	110	185
Sebastes cheni (Muscle)	Around 3km Offshore of Odaka Ward (T-S2)	September 5, 2012	210	330	540
Drumfish (Muscle)	Around 3km Offshore of Odaka Ward (T-S2)	September 5, 2012	18	40	58
Ovalipes punctatus (Whole)	Around 3km Offshore of Odaka Ward (T-S2)	September 5, 2012	ND	6.6	6.6
Flatfish (Muscle)	Around 3km Offshore of Odaka Ward (T-S2)	September 5, 2012	24	52	76
Dasyatis matsubarai (Muscle)	Around 3km Offshore of Odaka Ward (T-S2)	September 5, 2012	28	55	83

\* When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows.

Cs-134: Approx. 4.7Bq/kg (Raw), Cs-137: Approx. 4.1Bq/kg (Raw)

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

\* Standard Value (after April 1, 2012) Cs-134+Cs-137: 100Bq/kg

#### Nuclide Analysis Results of Fish and Shellfish (The Ocean Area Within 20km Radius of Fukushima Daiichi NPS) < 6/10 >

(Data summarized on September 19)

Name of Sample	Place of Sampling (Place No.)		Radioactivity Density [Bq/kg (Raw)] (Half-life)		
(Region)		Date of Sampling	Cs-134 (Approx. 2 years)	Cs-137 (Approx. 30 years)	Total
Chub mackerel (Muscle)	Around 3km Offshore of Odaka Ward (T-S2)	September 5, 2012	ND	ND	ND
Dory (Muscle)	Around 3km Offshore of Odaka Ward (T-S2)	September 5, 2012	19	25	44
Carcharhinus (Muscle)	Around 3km Offshore of Odaka Ward (T-S2)	September 5, 2012	ND	7.2	7.2
Common Skete (Muscle)	Around 4km Offshore of Kumagawa (T-S8)	August 25, 2012	150	240	390
Microstomus achne (Muscle)	Around 4km Offshore of Kumagawa (T-S8)	August 25, 2012	150	230	380
Flatfish (Muscle)	Around 4km Offshore of Kumagawa (T-S8)	August 25, 2012	63	100	163
Sea robin (Muscle)	Around 4km Offshore of Kumagawa (T-S8)	August 25, 2012	24	35	59
Smooth dogfish (Muscle)	Around 4km Offshore of Kumagawa (T-S8)	August 25, 2012	32	56	88
Marbled sole (Muscle)	Around 4km Offshore of Kumagawa (T-S8)	August 25, 2012	81	130	211
Flathead (Platycephalus sp.) (Muscle)	Around 4km Offshore of Kumagawa (T-S8)	August 25, 2012	61	97	158

\* When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows.

Cs-134: Approx. 4.9Bq/kg (Raw), Cs-137: Approx. 4.3Bq/kg (Raw)

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

\* Standard Value (after April 1, 2012) Cs-134+Cs-137: 100Bq/kg

#### Nuclide Analysis Results of Fish and Shellfish (The Ocean Area Within 20km Radius of Fukushima Daiichi NPS) < 7/10 >

(Data summarized on September 19)

Name of Sample	Place of Sampling		Radioactivity Density [Bq/kg (Raw)] (Half-life)		
(Region)	(Place No.)	Date of Sampling	Cs-134 (Approx. 2 years)	Cs-137 (Approx. 30 years)	Total
Carcharhinus (Muscle)	Around 4km Offshore of Kumagawa (T-S8)	August 25, 2012	34	59	93
Stone flounder (Muscle)	Around 15km Offshore of Odaka Ward (T-B1)	August 28, 2012	24	45	69
Lepidotrigla microptera (Muscle)	Around 15km Offshore of Odaka Ward (T-B1)	August 28, 2012	6.4	12	18.4
Crimson sea bream (Muscle)	Around 15km Offshore of Odaka Ward (T-B1)	August 28, 2012	ND	ND	ND
Microstomus achne (Muscle)	Around 15km Offshore of Odaka Ward (T-B1)	August 28, 2012	8.9	15	23.9
Marbled sole (Muscle)	Around 15km Offshore of Odaka Ward (T-B1)	August 28, 2012	10	19	29
Dory (Muscle)	Around 15km Offshore of Odaka Ward (T-B1)	August 28, 2012	5.8	8.3	14.1
Greenling (Muscle)	Around 18km Offshore of Ukedo River (T-B2)	August 28, 2012	ND	4.0	4.0
Lepidotrigla microptera (Muscle)	Around 18km Offshore of Ukedo River (T-B2)	August 28, 2012	8.8	9.6	18.4
Crimson sea bream (Muscle)	Around 18km Offshore of Ukedo River (T-B2)	August 28, 2012	12	14	26

\* When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows.

Cs-134: Approx. 4.5Bq/kg (Raw), Cs-137: Approx. 4.7Bq/kg (Raw)

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

\* Standard Value (after April 1, 2012) Cs-134+Cs-137: 100Bq/kg

# Nuclide Analysis Results of Fish and Shellfish (The Ocean Area Within 20km Radius of Fukushima Daiichi NPS) < 8/10 >

(Data summarized on September 19)

Name of Sample	Place of Sampling		Radioactivity Density [Bq/kg (Raw)] (Half-life)		
(Region)	( Place No. )	Date of Sampling	Cs-134 (Approx. 2 years)	Cs-137 (Approx. 30 years)	Total
Smooth dogfish (Muscle)	Around 18km Offshore of Ukedo River (T-B2)	August 28, 2012	6.1	7.4	13.5
Littlemouth flounder (Muscle)	Around 18km Offshore of Ukedo River (T-B2)	August 28, 2012	4.3	5.7	10
Marbled sole (Muscle)	Around 18km Offshore of Ukedo River (T-B2)	August 28, 2012	17	24	41
Dory (Muscle)	Around 18km Offshore of Ukedo River (T-B2)	August 28, 2012	20	32	52
Balloonfish (Muscle)	Around 18km Offshore of Ukedo River (T-B2)	August 28, 2012	4.2	6.0	10.2
Greenling (Muscle)	Around 10km Offshore of 1F (T-B3)	August 20, 2012	13	30	43
Stone flounder (Muscle)	Around 10km Offshore of 1F (T-B3)	August 20, 2012	28	47	75
Lepidotrigla microptera (Muscle)	Around 10km Offshore of 1F (T-B3)	August 20, 2012	12	27	39
Lophius litilon (Whole)	Around 10km Offshore of 1F (T-B3)	August 20, 2012	4.2	6.5	10.7
Common Skete (Muscle)	Around 10km Offshore of 1F (T-B3)	August 20, 2012	93	150	243

\* Standard Value (after April 1, 2012) Cs-134+Cs-137: 100Bq/kg

#### Nuclide Analysis Results of Fish and Shellfish (The Ocean Area Within 20km Radius of Fukushima Daiichi NPS) < 9/10 >

(Data summarized on September 19)

Name of Sample (Region)	Place of Sampling	Radioactivity		ctivity Density [Bq/kç (Half-life)	ity Density [Bq/kg (Raw)] (Half-life)	
	( Place No. )	Date of Sampling	Cs-134 (Approx. 2 years)	Cs-137 (Approx. 30 years)	Total	
Microstomus achne (Muscle)	Around 10km Offshore of 1F (T-B3)	August 20, 2012	32	46	78	
Flatfish (Muscle)	Around 10km Offshore of 1F (T-B3)	August 20, 2012	ND	5.9	5.9	
Dory (Muscle)	Around 10km Offshore of 1F (T-B3)	August 20, 2012	12	19	31	
Greenling (Muscle)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	86	150	236	
Stone flounder (Muscle)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	14	24	38	
Zenopsis nebulosa (Muscle)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	ND	ND	ND	
Lepidotrigla microptera (Muscle)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	8.0	15	23	
Lophius litilon (Whole)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	ND	ND	ND	
Common Skete (Muscle)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	110	190	300	
Microstomus achne (Muscle)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	84	130	214	

\* When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows.

Cs-134: Approx. 6.8Bq/kg (Raw), Cs-137: Approx. 4.1Bq/kg (Raw)

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

\* Standard Value (after April 1, 2012) Cs-134+Cs-137: 100Bq/kg

# Nuclide Analysis Results of Fish and Shellfish (The Ocean Area Within 20km Radius of Fukushima Daiichi NPS) < 10/10 >

(Data summarized on September 19)

Name of Sample	Place of Sampling		Radioactivity Density [Bq/kg (Raw)] (Half-life)		g (Raw)]
(Region)	( Place No. )	Date of Sampling	Cs-134 (Approx. 2 years)	Cs-137 (Approx. 30 years)	Total
Flatfish (Muscle)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	15	28	43
Smooth dogfish (Muscle)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	9.3	9.6	18.9
Marbled sole (Muscle)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	35	58	93
Pagrus major (Muscle)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	ND	ND	ND
Dory (Muscle)	Around 10km Offshore of 2F (T-B4)	August 20, 2012	22	41	63

\* When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows.

Cs-134: Approx. 4.5Bq/kg (Raw), Cs-137: Approx. 4.5Bq/kg (Raw)

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

\* Standard Value (after April 1, 2012) Cs-134+Cs-137: 100Bq/kg