#### Plant Status of Fukushima Daiichi Nuclear Power Station

June 28, 2011

Tokyo Electric Power Company

# <Draining Water on Underground Floor of Turbine Building (T/B)>

Construction status of accumulated radioactive water treatment system and storage tank facility [Treatment Facility]

·6/17	20:00 ~	Full operation started.
·6/23	0:43 ~	Passing water test started at water treatment facilities with high radiation water
·6/24	12:00 ~	Water treatment started at water desalination facilities
·6/25	15:24	Water treatment was reactivated after automatically tripped.
	16:10	Water treatment automatically tripped again.
	16:35	We confirmed that the trip was triggered by "water level low" at the oil separator. We selected the
		other water level gauge with the same automatic trip function and restarted the water treatment
		facilities.
·6/27		
	16:20	We started circulating injection cooling with treated water in the water treatment facilities in addition
	16:20	We started circulating injection cooling with treated water in the water treatment facilities in addition to water injection from filtration tank in Unit 1 to 3.
	16:20 17:55	
		to water injection from filtration tank in Unit 1 to 3.

Water treatment was temporarily suspended for the flashing to change vessels during 13:00-14:00 on June 23, 10:00-12:50 on June 24, 10:00-15:00 on June 25, 10:00-18:10 on June 26 and 10:06~12:24 on June 28. [Storage Facility]

■ June 8, big tanks to store and to keep treated or contaminated water being transferred and installed sequentially

Accumulated water in vertical shafts of trenches and at basement level of building (as of 6/28 7:00)

Unit	Draining water source → Place transferred	Status		
2u	2u Vertical Shaft of Trench → Process Main Building, Central	[Process Main Building]		
	Radioactive Waste Treatment Facility	Water level: O.P.+4,875 mm		
	(4/19 10:08am ~ 5/26 4:01pm, 6/4 6:39pm ~ 6/8 2:20pm, 6/8	(10mm decrease from 6/27		
	6:03pm ~ 6/16 8:40am, 6/22 9:56am ~ 6/27 9:02am, 6/27	7:00am)		
	5:07pm ~ )	(Accumulated total increase :		
3u	3u T/B → Miscellaneous Solid Waste Volume Reduction	6,092mm)		
	Treatment Building of Central Radioactive Waste Treatment			
	Facility	[Miscellaneous Solid Waste		
	(5/17 18:04 ~ 5/25 9:10, 6/18 13:31 ~ 6/20 0:02)	Volume Reduction Treatment		
	3u T/B → Process Main Building of Central Radioactive Waste	Building]		
	Treatment Facility	Water level: O.P.+3,135m		
	(6/14 10:05am ~ 6/16 8:46am, 6/21 3:32pm ~ , 6/27	(20mm increase from 6/27		

	3:44pm~ and 6/27 5:00pm~6/28 9:58pm)	7:00am)	
		(Accumulated to	tal
		increase:3,861mm)	
6u	6u Turbine Building → temporary tanks		
	(5/1 ~ 6/22 on demand basis)		

<sup>·6/28</sup> around 12:00pm A water level meter of outside temporary tanks to which the accumulated water in the turbine building of Unit 6 fell down and leaked water and therefore we close the main valve. The leakage has stopped.

## Water level at the vertical shaft of the trench and T/B (as of 6/28 7:00)

	Vertical Shaft of Trench (from top of grating to surface)	T/B	
1u	O.P. <+850mm (>3,150mm), No change since 6/27	O.P. +4,920mm, No change since 6/27	
	7:00am	7:00am	
2u	O.P. +3,653mm (347mm), 6mm increase since 6/27	O.P. +3,648mm, 4mm increase since 6/27	
	7:00am	7:00am	
3u	O.P. +3,820mm (180mm), 14mm decrease since	O.P. +3,744mm 41mm decrease since 6/27	
	6/27 7:00am	7:00am	
4u		O.P. +3,775mm, 18mm decrease since 6/27	
	-	7:00am	

- Water level at Unit 1 R/B: 6/28 7:00am, O.P. +4,547mm, 53mm increase since 6/27 7:00am.
- Unit 2 and 3, blockage to the extension of the pit and the unidentified flow path is underway.
  (Blockage work of pits similar to outflow event or whose closure would ensure flow routes completed by 6/10)

## <Monitoring of Radioactive Materials >

Nuclide Analysis of Seawater (Reference)

Density limit by the announcement of Reactor Regulation: I-131: 40Bq/L\*, Cs-134: 60Bq/L, Cs-137: 90Bq/L

Sampling Location		Time	Ratio to Criteria (times)		
		Tille	lodine-131	Cecium-134	Cecium-137
30m north of 5 ~ 6u Discharge Canal, Fukushima Daiichi	6/27	10:10am/2:20 pm	ND/ND	0.62/0.67	0.47/0.42
330m south of 1 ~ 4u Discharge Canal, Fukushima Daiichi	6/27	9:45am/2:10pm	ND/ND	0.52/0.43	0.37/0.29
Around north water discharge channel, Fukushima Daini (10km from Fukushima	6/27	8:25am	ND	0.14	0.06

Daiichi)					
Iwasawa shore, Naraha town (16km from	6/27	7:55am	ND	0.13	0.08
Fukushima Daiichi)					

All the data of following 10 locations (20 points in total: 3, 8 am 15km offshore collected on June 27 (upper and lower layer).) the result is below detection limit.

Iwasawa Shore, Naraha town: 3, 8 and 15 km offshore

Hirono town: 15km offshore

North part of Iwaki city: 3km offshore Natsuigawa, Iwaki city: 3km offshore Onhama port, Iwaki city: 3km offshore

Ena Iwaki city: 3km offshore

Numanouchi city, lwaki city: 3km offshore Toyoma city, lwaki city: 3km offshore

Alos, all the data of following 5 locations (10 points in total: 3km offshore collected on June 24 and 25 )(upper and lower layer) we offshore collected on June 27 (upper and lower layer).), the result is under detection limit.

Takado, Onahama shore, Ibaraki Pref.: 3km offshore

Kujihama shore, Ibaraki Pref.: 3km offshore Oarai shore, Ibaraki Pref.: 3km offshore Hirai shore, Ibaraki Pref.: 3km offshore

Hasaki Town shore, Ibaraki Pref.: 3km offshore

#### <Water Injection and Spraying to Spent Fuel Pools>

Results	Unit 3	From 3:00pm to 5:18pm, injected boric-acid solution by Fuel Pool Cooling and Clean up
		System. (approx. 60t)
Plans	Unit 3	From3:00 pm, injected boric-acid solution by Fuel Pool Cooling and Clean up System is
Fialls		planned.

- 5/31 ~ , circulating cooling system for 2u Spent Fuel Pool in service. Pool water temperature 6/28 11:00am: 34

### <u><Water Injection to Reactor Pressure Vessels> (as at 6/28 11:00)</u>

Unit	Status of injecting water	Temp. of feed-water nozzle	Bottom of reactor pressure vessel
1u	Injecting freshwater (approx. 3.1m³/h)*	110.2	100.8
2u	Injecting freshwater (approx. 3.6m³/h)	109.6	120.3
3u	Injecting freshwater (approx. 9.1 ~ 9.2m³/h)	153.7 *	127.2

[Unit 4] Units 5] [Units 6] [Common spent fuel pool] No particular changes on parameters.

#### <Injection of Nitrogen Gas to the Primary Containment Vessel of Unit 1>

- Primary Containment Vessel pressure: 156.3 (4/7 1:20am)  $\rightarrow$  136.5 kPaabs, (6/28 11:00pm) approx. 54,200m³.

\*Due to the internal power line switch, from 8:51 am to 3:07 pm on June 27, the operation of Nitrogen Injection system was temporarily suspended.

<sup>\*</sup>At 11:47am on June 28<sup>-</sup> as we confirmed some decrease of the injected water into the reactor of Unit 1, we set the injection volume of 3.5m<sup>3</sup>/h

<others></others>	
·4/10 ~	Clearance of outdoor rubbles by a remote control to improve working conditions.
·4/26 ~	Spraying dust inhibitor in the site of the power station. (on 6/27, west side of Unit 5 & 6 reactor
	building, etc, approx 5,300 <sup>2</sup> , 6/27 and on 6/28 around filtrating tanks).
·5/10 ~	Clearing of rubble in front of carry-in gate for large stuff of reactor building of Unit 3 by robots.
·5/13 ~	Preparation work for installation of Reactor Building Cover of Unit 1.
·6/3 ~	Restoration works of port related facilities carried out.
· 6/7 ~ 6/20	Installation of support structure into the bottom of fuel spent pool of reactor building of Unit 4.
·6/21 ~	Concrete filling and grout started.
·6/25	Airflow survey was conducted near the airlock and the large equipment carry-in entrance, R/B,
	Units 1&2.
·6/27	Following the completion of Okuma line 2 stoppage work (June 20 to 26) in order to conduct
	repair of Unit 1 and 2 switching station, the internal power line switch is being conducted.
·6/27	Operating an emergency diesel generator of Unit 5 (5A) on trial, and operate practically.
·6/28	Operating an emergency diesel generator of Unit 5 (5B) on trial, and operate practically.
·6/28	Injection water into the reactor well of reactor building of Unit 4 and.

.6/28

Unit 1.

Began to construct the main body of the building for installing the cover for the reactor building of

END