

FY2014 2nd Quarter Earnings Results  
(April 1 – September 30, 2014)  
Presentation Material

Tokyo Electric Power Company  
October 31, 2014

## ***Regarding Forward-Looking Statements***

*Certain statements in the following presentation regarding Tokyo Electric Power Company's business operations may constitute "forward-looking statements." As such, these statements are not historical facts but rather predictions about the future, which inherently involve risks and uncertainties, and these risks and uncertainties could cause the Company's actual results to differ materially from the forward-looking statements herein.*

*(Note)*

*Please note that the following to be an accurate and complete translation of the original Japanese version prepared for the convenience of our English-speaking investors. In case of any discrepancy between the translation and the Japanese original, the latter shall prevail.*

# I. Overview of FY2014 2nd Quarter Earnings Results

## Overview

- **Both consolidated and non-consolidated operating revenues increased** due to an increase in the unit electricity sales price resulting from the fuel cost adjustments, etc.
- **Ordinary income recorded a profit on each of consolidated and non-consolidated basis** mainly due to extensive cost reduction efforts targeting all of TEPCO continued from the previous year, such as postponement of maintenance works to the utmost extent, in spite of the fact that the amount of fuel expenses remains at high level caused by factors such as the depreciation of the yen because of the suspension of all nuclear power stations.
- **TEPCO's net income showed profit on both consolidated and non-consolidated bases.** While estimated amounts of expenses for nuclear damage compensations was recorded as extraordinary loss, TEPCO also recorded grants-in-aid from Nuclear Damage Compensation and Decommissioning Facilitation Corporation as an extraordinary income.

<b>Operating Revenues:</b>	[Consolidated] <b>¥3,334.1 billion</b> (¥118.0 billion increase, YOY)	[Non-consolidated] <b>¥3,259.5 billion</b> (¥132.9 billion increase, YOY)
<b>Ordinary Income:</b>	[Consolidated] <b>¥242.8 billion</b> (¥101.1 billion increase, YOY)	[Non-consolidated] <b>¥214.6 billion</b> (¥102.5 billion increase, YOY)
<b>Net Income:</b>	[Consolidated] <b>¥290.1 billion</b> (¥326.0 billion decrease, YOY)	[Non-consolidated] <b>¥270.9 billion</b> (¥322.1 billion decrease, YOY)
<b>Equity Ratio:</b>	[Consolidated] <b>12.9%</b> (up 2.4 pp from the end of last FY)	[Non-consolidated] <b>10.8%</b> (up 2.2 pp from the end of last FY)

## FY2014 Full-Year Earnings Forecasts

As for the FY2014 full-year projections, Operating Revenues, Ordinary Income and Net Income have been left as “to be determined”, because the present situation makes it difficult to release an operation plan for Kashiwazaki-Kariwa Nuclear Power Station. In addition, we are thoroughly studying the room for cost reduction through the initiative of Productivity Doubling Committee. We will announce the projections as soon as we are in a position to do so.

## FY2014 Dividend

TEPCO has decided to pay out no interim dividend considering current severe management environments. We regret to plan no year-end dividend as well.



# Earnings Results Summary (Consolidated and Non-Consolidated)

(Upper and lower rows show consolidated and non-consolidated figures, respectively.)

(Unit: Billion Yen)

		FY2014 (A)	FY2013 (B)	Comparison	
		First Half	First Half	(A)-(B)	(A)/(B)(%)
Operating Revenues	consolidated	3,334.1	3,216.1	118.0	103.7
	non-consolidated	3,259.5	3,126.5	132.9	104.3
Operating Expenses		3,050.8	3,048.9	1.9	100.1
		2,994.3	2,978.1	16.1	100.5
Operating Income		283.3	167.2	116.0	169.4
		265.2	148.4	116.8	178.7
Ordinary Revenues		3,365.2	3,255.2	110.0	103.4
		3,279.6	3,152.4	127.2	104.0
Ordinary Expenses		3,122.3	3,113.5	8.8	100.3
		3,065.0	3,040.3	24.6	100.8
Ordinary Income		242.8	141.6	101.1	171.4
		214.6	112.0	102.5	191.5
Extraordinary Income		512.5	740.5	-227.9	-
		512.5	738.2	-225.6	-
Extraordinary Loss		445.9	252.6	193.3	-
		445.9	252.6	193.3	-
Net Income		290.1	616.1	-326.0	47.1
		270.9	593.1	-322.1	45.7
Equity Ratio (%)		12.9	12.1	0.8	-
		10.8	10.1	0.7	-
Return on Asset (%)		1.9	1.1	0.8	-
		1.9	1.0	0.9	-
Return on Equity (%)		17.1	42.9	-25.8	-
		19.8	52.6	-32.8	-
Earnings per Share (Yen)		181.07	384.53	-203.46	-
		168.92	369.78	-200.86	-

(Units: Billion kWh, %)

Electricity Sales Volume	FY2014			Full-year Outlook for FY2014	
	1st Quarter	2nd Quarter	1st Half	Latest Projection	Projection (As of Jul. 31)
Regulated segment	21.56 (-1.2)	24.71 (-8.5)	46.27 (-5.3)	102.73 (-2.2)	102.49 (-2.5)
Lighting	19.41 (-1.0)	21.84 (-8.3)	41.25 (-5.0)	93.00 (-1.7)	93.00 (-1.7)
Low voltage	1.71 (-1.2)	2.49 (-10.9)	4.20 (-7.2)	8.18 (-7.6)	7.92 (-10.6)
Others	0.45 (-7.9)	0.37 (-8.4)	0.82 (-8.1)	1.55 (-6.7)	1.57 (-5.3)
Liberalized segment	38.19 (-1.0)	42.32 (-4.4)	80.50 (-2.8)	161.14 (-0.3)	163.33 (1.1)
Commercial use	15.30 (-1.9)	18.16 (-6.5)	33.46 (-4.5)	- (-)	- (-)
Industrial use and others	22.89 (-0.4)	24.16 (-2.7)	47.05 (-1.6)	- (-)	- (-)
<b>Total electricity sales volume</b>	<b>59.75 (-1.1)</b>	<b>67.03 (-5.9)</b>	<b>126.78 (-3.7)</b>	<b>263.87 (-1.1)</b>	<b>265.83 (-0.3)</b>

**[FY2014 1H Results]**

Total electricity sales volume decreased by 3.7% year on year. This is mainly due to decline in the use of air-conditioning with the effect of the temperature in summer being lower than the previous year.

**[FY2014 Full-Year Projection]**

The latest projection is approximately 1.96 billion kWh decrease from the projection as of July 31, 2014, taking the actual 2nd quarter sales volume into account.

Note: Figures in parentheses denote percentage change from the previous year. Rounded to the nearest decimal point.

(Units: Billion kWh, %)

Total Power Generated and Purchased	FY2014		
	1st Quarter	2nd Quarter	1st Half
Total power generated and purchased	63.62 (-1.7)	71.97 (-6.5)	135.59 (-4.3)
Power generated by TEPCO	51.82	57.27	109.09
Hydroelectric power generation	3.32	3.15	6.47
Thermal power generation	48.49	54.10	102.59
Nuclear power generation	-	-	-
Renewable Energy	0.01	0.02	0.03
Power purchased from other companies	12.08	15.20	27.28
Used at pumped storage	-0.28	-0.50	-0.78

Note: Figures in parentheses denote percentage change from the previous year.

**Average Monthly Temperature**

(Unit: °C)

	Jul.	Aug.	Sep.
FY2014	26.1	26.9	22.4
Change from the previous year	-0.3	-1.5	-1.8
Gap with average year	1.0	0.2	-0.7

Note: Average temperature uses temperatures observed at nine weather stations in TEPCO's operating area, weighted to reflect electric power volume of respective branch offices.

(Unit: Billion Yen)

	FY2014 First Half Actual (A)		FY2013 First Half Actual (B)		Comparison (A)-(B)	
	Consolidated	Non-consolidated	Consolidated	Non-consolidated	Consolidated	Non-consolidated
Operating Revenues	3,334.1	3,259.5	3,216.1	3,126.5	118.0	132.9
Operating Income	283.3	265.2	167.2	148.4	116.0	116.8
Ordinary Income	242.8	214.6	141.6	112.0	101.1	102.5
Net Income	290.1	270.9	616.1	593.1	-326.0	-322.1

<Factors behind variance between results of FY2014 1H and FY2013 1H (Non-consolidated)>

Positive Factors for Performance	Negative Factors for Performance	Impact (Billion Yen)
<ul style="list-style-type: none"> <li>Increase in electricity sales revenues: 73.5</li> <li>Effects of fuel cost adjustments: Approx. 138.0 billion yen</li> <li>Increase in electricity sales volume to other utilities/suppliers: 20.2</li> <li>Increase in revenues from others: 33.4</li> </ul> <p><b>Changes in ordinary revenues</b> Total: About 222.5</p>	<p>[Reference]</p> <ul style="list-style-type: none"> <li>Rise in unit sales prices: (FY13 2Q: 21.90 yen/kWh → FY14 2Q: 23.32 yen/kWh)</li> <li>Revenue from fuel price adjustments: (FY13 2Q: approx. 161.0 billion yen → FY14 2Q: approx. 299.0 billion yen)</li> </ul>	73.5
		20.2
		33.4
		127.2
	<ul style="list-style-type: none"> <li>Increase in personnel expenses: -19.6</li> <li>Increase in maintenance expenses: -8.0</li> <li>Increase in purchased power from other utilities/suppliers: -21.6</li> <li>Increase in taxes and other public charges: -0.7</li> <li>Increase in nuclear power back-end cost: -8.2</li> <li>Increase in other expenses: -60.9</li> </ul> <p>Total: About -120.0</p>	-19.6
		80.9
		-8.0
		7.7
		5.8
		-0.7
		-8.2
		-60.9
<b>Changes in ordinary expenses</b>		-24.6
<b>Changes in Ordinary Income</b>		102.5
	<ul style="list-style-type: none"> <li>Reserve for depreciation of nuclear plants construction: -0.0</li> <li>Decrease in extraordinary income: -225.6</li> <li>Increase in extraordinary loss: -193.3</li> <li>Increase in corporate tax and etc.: -5.6</li> </ul>	-0.0
		-225.6
		-193.3
		-5.6
<b>Changes in Net Income</b>		-322.1

**[Factors on consumption volume side]** approx. 65.0 billion yen  
 • Decrease in total power generated and purchased, etc. approx. 65.0 billion yen

**[Factors on price side]** approx. 16.0 billion yen  
 • Fluctuations of CIF and foreign exchange approx. -43.0 billion yen  
 • Decrease due to thermal efficiency approx. 59.0 billion yen

• Payment of Act on Special Measures Concerning Procurement of Renewable Electric Energy by Operators of Electric Utilities -38.3 billion

**[Decrease in Extraordinary Income]** -225.6 billion yen  
 • Decrease in Grants-in-aid from NDF -153.6 billion yen  
 • Decrease in gain on sales of fixed assets -72.0 billion yen

**[Increase in Extraordinary Loss]** -193.3 billion yen  
 • Decrease in extraordinary loss on disaster 22.0 billion yen  
 • Increase in expenses for nuclear damage compensation -215.4 billion yen

Note: Please refer to page 15 to 17 for the details of the ordinary expenses.

# Financial Impact of the Great East Japan Earthquake [Extraordinary Income/Loss]

## Grants-in-aid from Nuclear Damage Compensation and Decommissioning Facilitation Corporation [Extraordinary Income]

(Unit: billion yen)

Item	FY 2010 to FY2012	FY2013	FY2014		Cumulative Amount
			First Quarter	First Half	
- Grants-in-aid based on Article 41-1-1 of Nuclear Damage Compensation and Decommissioning Facilitation Corporation Act	3,123.0*	1,665.7	-	512.5	5,301.4*

Note: Journal Entry: Grants-in-aid receivable from Nuclear Damage Compensation and Decommissioning Facilitation Corporation is debited on the balance sheet.

\* Numbers above are those after deduction of a governmental indemnity of 120 billion yen.

## Loss on Disaster [Extraordinary Loss] and Gain on reversal of provision for loss on disaster [Extraordinary Income]

(Unit: billion yen)

Items	FY 2010 to FY2012	FY2013	FY2014		Cumulative Amount
			First Quarter	First Half	
- Expenses and/or losses for Fukushima Daiichi Nuclear Power Station Units 1 through 4 • Expenses and/or losses for settling the nuclear accident and preparing for decommissioning • Expenses and/or losses for decommissioning Fukushima Daiichi Nuclear Power Station Units 1 through 4	965.0	27.6	-	-	992.7
- Other expenses and/or losses • Expenses for maintaining the status of "cold shutdown" at Fukushima Daiichi Units 5 and 6 and Fukushima Daini Nuclear Power Station • Losses on cancelation of Fukushima Daiichi Units 7 and 8 construction plan • Expenses and/or losses for restoring damaged thermal power plants And others.	390.1	-0.8	-	-	389.2
<b>Loss on Disaster Sub Total (Extraordinary Loss):(A)</b>	<b>1,355.2</b>	<b>26.7</b>	<b>-</b>	<b>-</b>	<b>1,382.0</b>
<b>Gain on reversal of provision for loss on disaster (Extraordinary Income):(B)</b> • Difference of the restoration cost caused by re-estimation due to decommissioning of Fukushima Daiichi Nuclear Power Station Unit 5 and 6	-	32.0	-	-	32.0
<b>Total: (A)-(B)</b>	<b>1,355.2</b>	<b>-5.2</b>	<b>-</b>	<b>-</b>	<b>1,349.9*</b>

\* Cumulative amount of restoration cost caused by the Tohoku-Chihou-Taieiyo-Oki Earthquake is 1,355.5 billion yen (including 5.5 billion yen recorded as Non-operation Expenses for the second quarter of FY2014)

## Loss on decommissioning of Fukushima Daiichi Nuclear Power Station Unit 5 and 6 [Extraordinary Loss]

(Unit: billion yen)

Item	FY 2010 to FY2012	FY2013	FY2014		Cumulative Amount
			First Quarter	First Half	
- Expenses and/or losses for decommissioning of Fukushima Daiichi Nuclear Power Station Units 5 and 6	-	39.8	-	-	39.8

## Expenses for Nuclear Damage Compensation [Extraordinary Loss]

(Unit: billion yen)

Items	FY 2010 to FY2012	FY2013	FY2014		Cumulative Amount
			First Quarter	First Half	
- Compensation for individual damages • Expenses for radiation inspection, Expenses for evacuation, Expenses for temporary return, Expenses for Mental distress, Damages caused by voluntary evacuations, and Opportunity losses on salary of workers	1,484.3	516.2	7.0	19.8	2,020.4
- Compensation for business damages • Opportunity losses on businesses, Damages due to the restriction on shipment, Damages due to groundless rumor, and Indirect business damages	1,360.7	350.3	72.5	240.5	1,951.6
- Other expenses • Damages due to decline in value of properties, Housing assurance damages, and Contribution to The Fukushima Pref. Nuclear Accident Affected People and Child Health Fund	961.8	529.0	139.3	185.6	1,676.5
- Amount of indemnity for nuclear accidents from Government	-120.0	-	-	-	-120.0
<b>Total</b>	<b>3,686.9</b>	<b>1,395.6</b>	<b>218.8</b>	<b>445.9</b>	<b>5,528.5</b>



### Key Factors Affecting Performance

<b>Electricity Sales Volume (billion kWh)</b>
<b>Crude Oil Prices (All Japan CIF; dollars per barrel)</b>
<b>Foreign Exchange Rate (Interbank; yen per dollar)</b>
<b>Flow Rate (%)</b>
<b>Nuclear Power Plant Capacity Utilization Ratio (%)</b>

FY2014		
First Half Actual	Full-year Projection	
	(As of Oct. 31)	(As of Jul. 31)
126.8	263.9	265.8
109.51	-	-
103.01	-	-
98.4	-	-
-	-	-

[Reference]

	FY2013 Actual Performance	
	First Half	Full-Year
Electricity Sales Volume (billion kWh)	131.7	266.7
Crude Oil Prices (All Japan CIF; dollars per barrel)	107.69	110.01
Foreign Exchange Rate (Interbank; yen per dollar)	98.86	100.17
Flow Rate (%)	92.4	94.4
Nuclear Power Plant Capacity Utilization Ratio (%)	-	-

(Unit: billion yen)

### Financial Impact (Sensitivity)

<b>Crude Oil Prices (All Japan CIF; 1 dollar per barrel)</b>
<b>Foreign Exchange Rate (Interbank; 1 yen per dollar)</b>
<b>Flow Rate (1%)</b>
<b>Nuclear Power Plant Capacity Utilization Ratio (1%)</b>
<b>Interest Rate (1%)</b>

FY2014 Full-year Projection		[Reference] FY2013 Full-Year Actual Performance
(As of Oct. 31)	(As of Jul. 31)	
-	-	Approx.24.0
-	-	Approx.28.0
-	-	Approx.2.0
-	-	-
-	-	Approx.24.0

Note: Crude oil prices, foreign exchange rate, flow rate and nuclear power plant capacity utilization ratio of financial impact reflect the impact on annual fuel expenses. Interest rate reflects the incremental amount of interest.

## Fuel Consumption Data and Projection

	FY2011 Actual	FY2012 Actual	FY2013 Actual	FY2014 Full-year Outlook		FY2014 1st Half Actual	【Reference】 FY2013 1st Half Actual
				New	Previous		
<b>LNG</b> (million tons)	22.88	23.71	23.78	—	—	11.37	11.72
<b>Oil</b> (million kl)	8.08	10.50	6.82	—	—	1.40	2.77
<b>Coal</b> (million tons)	3.22	2.89	7.76	—	—	3.88	3.82

Note: The oil data is total of crude oil and heavy oil, not including gas oil.

The coal data is total of coal and biomass.

Monthly data for fuel consumption are available on TEPCO website.

URL: <http://www.tepco.co.jp/en/news/present/full-e.html>

SPOT and short-term contract LNG of approx. 4.00 million tons included

## Fuel Procurement

### Oil

	(Unit: thousand kl)			
	FY2010	FY2011	FY2012	FY2013
<b>Crude Oil</b>				
Indonesia	1,355	1,480	1,800	924
Brunei	—	—	158	—
China	—	—	—	—
Vietnam	—	—	174	—
Australia	150	306	194	179
Sudan	70	566	367	193
Gabon	—	120	540	286
Chad	—	—	31	190
Other	38	64	64	10
<b>Total imports</b>	<b>1,613</b>	<b>2,535</b>	<b>3,328</b>	<b>1,782</b>

	(Unit: thousand kl)			
	FY2010	FY2011	FY2012	FY2013
<b>Heavy Oil</b>				
<b>Total imports</b>	<b>3,002</b>	<b>5,774</b>	<b>7,454</b>	<b>4,750</b>

### LNG

	(Unit: thousand t)			
	FY2010	FY2011	FY2012	FY2013
<b>LNG</b>				
Alaska	418	—	—	—
Brunei	4,122	4,015	3,744	2,230
Abu Dhabi	4,761	4,914	4,804	4,684
Malaysia	3,874	3,867	3,439	3,675
Indonesia	166	54	—	—
Australia	352	239	296	289
Qatar	292	178	902	1,234
Darwin	2,131	1,950	2,063	2,629
Qalhat	561	689	689	768
Sakhalin	2,069	2,119	2,898	2,452
Spot contract	2,042	6,063	6,032	7,291
<b>Total imports</b>	<b>20,788</b>	<b>24,088</b>	<b>24,867</b>	<b>25,252</b>

### Coal

	(Unit: thousand t)			
	FY2010	FY2011	FY2012	FY2013
<b>Coal</b>				
Australia	2,915	3,310	3,187	6,801
USA	—	—	—	145
South Africa	—	—	—	—
China	—	—	—	—
Canada	87	—	70	—
Indonesia	48	—	94	830
Russia	—	—	—	—
<b>Total imports</b>	<b>3,050</b>	<b>3,310</b>	<b>3,351</b>	<b>7,776</b>

Note: Totals in the tables may not agree with the sums of each column because of being rounded off.

## <Cost reduction>

- In the New Comprehensive Special Business Plan, TEPCO and its subsidiaries & affiliated companies will implement further cost cuts of 1,419.4 billion yen and 108.5 billion yen, respectively from the previous Comprehensive Special Business Plan, and raise the target amount of ten years to 4,821.5 billion yen and 351.7 billion yen, respectively.
- The targets of TEPCO and its subsidiaries & affiliated companies for FY2014 are 576.1 billion yen and 36.7 billion yen, respectively. The prospect of achieving these targets will be determined around the end of 2014.

## <Asset disposal>

- Accumulated grand total of FY2011 to FY2013 regarding disposal of real estate, securities and subsidiaries & affiliated companies, which was the target set in the previous Comprehensive Special Business Plan, was achieved. Maximum efforts will continue to be made aiming most efficient business operation on the basis of growth strategies from the New Comprehensive Special Business Plan.

## <Streamlining Policy of New Comprehensive Special Business Plan (cost reduction)>

	Plan from FY2013 to FY2022	FY2013		FY2014	
		Plan	Outcomes	Plan	Projection
TEPCO	4,821.5 billion yen to be reduced over ten years (including additional cost cuts from the previous Comprehensive Special Business Plan of 1,419.4 billion yen)	786.2 billion yen	818.8 billion yen	576.1 billion yen	-
Subsidiaries & Affiliated Companies	351.7 billion yen to be reduced over ten years (including additional cost cuts from the previous Comprehensive Special Business Plan of 108.5 billion yen)	41.0 billion yen	50.9 billion yen	36.7 billion yen	-

- On September 4, 2014, “Productivity Doubling Committee” was established to proceed to further implementation of cost reduction measures including emergency cost deferral.
- This Committee, led by TEPCO Chairman Fumio Sudo, consists of TEPCO directors and the members of the Procurement Committee (established on November 19, 2012), which is made up of external experts on corporate regeneration and cost reduction. The Committee, which has been held twice (on September 4 and October 30) as of October 31, is thoroughly exploring any room left for cost reduction and productivity improvement and compiling a “Corporate Streamlining Report” as its final report by the end of this year.
- Through these initiatives, TEPCO plans to meet the cost reduction target set out in the New Comprehensive Special Business Plan (4,821.5 billion yen over ten years), and improve productivity on a continuous basis.

## [The Committee’s goal and approach]

### <Members>

Leader: Fumio Sudo (TEPCO Chairman)

Members: [12 members from TEPCO] Naomi Hirose (President), Director, Executive Officers and Managers

[ 3 external experts] Sakon Uda (Chairman of the Procurement Committee), and others

Observers: Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry

Nuclear Damage Compensation and Decommissioning Facilitation Corporation

### <Goal>

- Scrutinizing the current business approach of each supply chain to transform TEPCO’s cost structure, enabling continuous productivity improvement
- Making a complete departure from the culture of “fully distributed cost method” to adopt the mechanisms of target setting and cost management in order to achieve high productivity comparable to that of manufacturers under international competition

### <Approach>

- Making past streamlining efforts as open as possible, including the comparison with other industries and international benchmarks
- Involving external experts to thoroughly explore room for further cost reduction and productivity improvement with a view to enhance the efficiency of human, material and financial resources
- Compiling the “Corporate Streamlining Report” as the final report, and monitoring and following up on the progress of measures recommended in this report

- The “Reassessment of Fukushima Nuclear Accident and Nuclear Safety Reform Plan” (the “Reform Plan”) formulated by TEPCO’s Nuclear Reform Special Task Force was announced through the resolution of the Board of Directors after approval by the third Nuclear Reform Monitoring Committee held on March 29, 2013.
- On May 1, 2014, TEPCO briefed on the state of progress of the Reform Plan at the sixth meeting of the Committee. And the Committee reported its findings to TEPCO. TEPCO is now underway of steady implementation of the Reform Plan based on the initiatives proposed by the Committee and is going to report its progress during the FY2014 2nd quarter in November 2014.
- In the FY2014 3rd quarter, TEPCO plans to set KPI (Key Performance Indicator), target values and milestones to measure the achievement rate of the nuclear safety reform and to evaluate the goal achievement level at each milestone. Further, in addition to the progress of the Reform Plan, its outcome will also be checked at the end of this fiscal year, as it will have been two years since the Reform Plan was formulated.

### <Implementation Status toward Nuclear Safety Reform>

#### ● Reform of Top Management

- Monitoring on the pervading state of the Reform Plan and the expected items for the leaders in the nuclear power division was implemented. A system for self assessment has been prepared based on the result of the monitoring and comparison with the behavior examples (Traits and PO&C) set by WANO and INPO for realization of nuclear safety. The system has started its test operation.
- TEPCO plans to start full-scale operation of the self-assessment system using world-class behavior examples and its quantification. TEPCO also plans to understand weakness of organization and individuals relating to “improvement of safety consciousness” based on the result of the self assessment and set a KPI to measure the level of its improvement.

#### ● Enhancement of Oversight and Support for Management

- The Nuclear Safety Oversight Office (NSOO) continues its monitoring activity on the leadership of the management and the engagement of executives. With the support from WANO, INPO and overseas mentors, the trainings for the members of NSOO were provided and the level of oversight ability has been improved. NSOO also assessed its own activity and confirmed that it has brought about a positive change to TEPCO’s nuclear safety.
- NSOO will continue to review the implementation status of the action plan and report to the board meeting. The result of NSOO’s self-assessment will be reviewed by the committee composed of overseas experts in nuclear safety.

#### ● Enhancement of Ability to Propose Defense in Depth

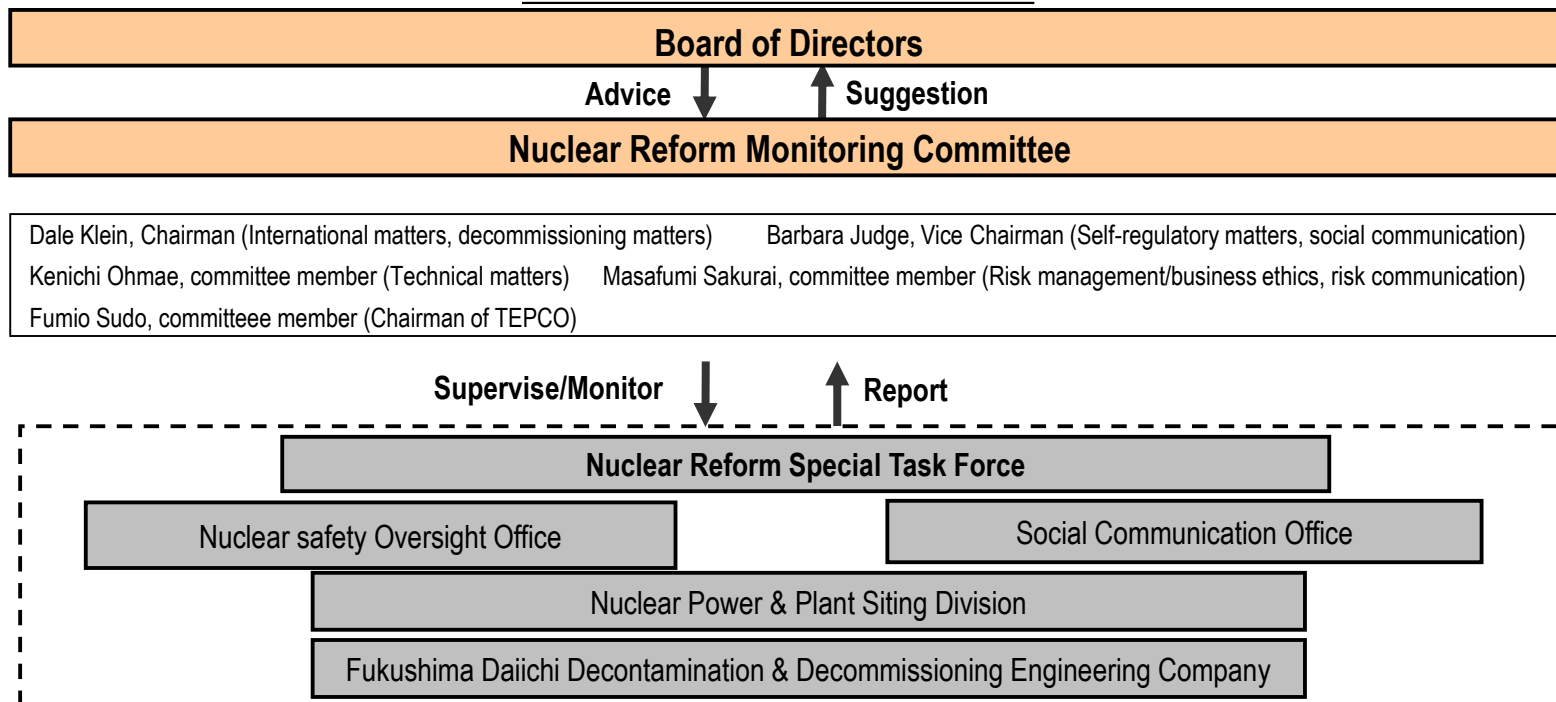
- The number of proposals for safety improvement has increased, and implementation in the field has also moved forward.
- In addition to the number of proposals, TEPCO plans to quantify and set KPIs on the improvement of the ability to make proposals and achieve countermeasures.

#### ● Enhancement of (individual) Emergency Response Abilities and On-Site Capabilities

- Training related to field operations have made progress at a pace exceeding the target. Studies have begun on building configuration management --- a mechanism to confirm and ensure that the nuclear power facilities are operated and maintained in accordance with the design requirements.
- TEPCO plans to set the number of qualifications necessary for the organization and to designate the fulfillment rate for such number as a KPI.

- On September 11, 2012, TEPCO established the Nuclear Reform Monitoring Committee\*<sup>1</sup> as advisory body to the Board of Directors, along with the Nuclear Reform Special Task Force\*<sup>2</sup> to be led by the President for the purpose of promptly and powerfully promoting management and safety culture reforms.
  - \*1 Nuclear Reform Monitoring Committee: The Committee monitors and supervises efforts of nuclear reform, then reports and suggests to the Board of Directors.
  - \*2 Nuclear Reform Special Task Force: The Task Force implements nuclear reform under the supervision of the Committee.
- On April 10, 2013, Social Communication Office was established. The Office has its purpose to instill corporate behaviors sensitive to social standards throughout TEPCO and to promote prompt and appropriate information disclosure through routinely collecting and analyzing information on potential risks.
- On May 15, 2013, Nuclear Safety Oversight Office was established directly under the Board of Directors. The Office shall effectively utilize independent third party expertise and support the Board of Directors with its decision making on nuclear safety.
- On April 1, 2014, “Fukushima Daiichi Decontamination & Decommissioning Engineering Company”, which is an internal entity, was established for the purpose of clarifying the responsibilities allocation and focusing solely on handling of decommissioning and contaminated water. “Chief Decommissioning Officer (CDO)” was positioned as Company President and three experienced executives invited from nuclear power manufacturers were assigned to the Vice President.

### Framework for Nuclear Reform



## II. FY2014 2nd Quarter Earnings Results (Detailed Information)

(Unit: Billion yen)

	FY2014 (A)	FY2013 (B)	Comparison	
	First Half	First Half	(A)-(B)	(A)/(B) (%)
Operating Revenues	3,334.1	3,216.1	118.0	103.7
Operating Expenses	3,050.8	3,048.9	1.9	100.1
<b>Operating Income</b>	283.3	167.2	116.0	169.4
Non-operating Revenues	31.0	39.0	-8.0	79.5
Investment Gain under the Equity Method	11.8	14.7	-2.8	80.7
Non-operating Expenses	71.5	64.6	6.9	110.7
<b>Ordinary Income</b>	242.8	141.6	101.1	171.4
(Reversal of or Provision for) Reserve for Preparation of the Depreciation of Nuclear Plants Construction	0.2	0.1	0.0	161.8
Extraordinary Income	512.5	740.5	-227.9	—
Extraordinary Loss	445.9	252.6	193.3	—
Income Tax and etc.	17.1	10.7	6.3	159.2
Minority Interests	1.8	2.4	-0.5	77.9
<b>Net Income</b>	290.1	616.1	-326.0	47.1

- Grants-in-aid from Nuclear Damage Compensation and Decommissioning Facilitation Corporation **512.5 billion yen**

- Grants-in-aid from Nuclear Damage Compensation and Decommissioning Facilitation Corporation **666.2 billion yen**  
- Gain on sales of fixed assets **74.2 billion yen**

- Extraordinary Loss on Disaster **22.0 billion yen**  
- Expenses for Nuclear Damage Compensation **230.5 billion yen**

- Expenses for Nuclear Damage Compensation **445.9 billion yen**



(Unit: Billion yen)

	FY2014 (A) First Half	FY2013 (B) First Half	Comparison	
			(A)-(B)	(A)/(B) (%)
<b>Ordinary Revenues</b>	<b>3,279.6</b>	<b>3,152.4</b>	<b>127.2</b>	<b>104.0</b>
<b>Operating Revenues</b>	<b>3,259.5</b>	<b>3,126.5</b>	<b>132.9</b>	<b>104.3</b>
Operating Revenues from Electric Power Business	3,201.8	3,067.6	134.1	104.4
Electricity Sales Revenues	2,956.8	2,883.3	73.5	102.6
Lighting	1,167.9	1,166.2	1.7	100.2
Power	1,788.8	1,717.0	71.7	104.2
Power Sold to Other Utilities	70.9	61.1	9.8	116.1
Power Sold to Other Suppliers	41.9	31.5	10.3	132.8
Other Revenues	132.0	91.6	40.4	144.1
<b>Operating Revenues from Incidental Business</b>	<b>57.6</b>	<b>58.8</b>	<b>-1.1</b>	<b>98.0</b>
<b>Non-operating Revenues</b>	<b>20.1</b>	<b>25.8</b>	<b>-5.7</b>	<b>77.8</b>
<b>Extraordinary Income</b>	<b>512.5</b>	<b>738.2</b>	<b>-225.6</b>	<b>—</b>

(Unit: Billion yen)

	FY2014 (A)	FY2013 (B)	Comparison	
	First Half	First Half	(A)-(B)	(A)/(B) (%)
<b>Ordinary Expenses</b>	<b>3,065.0</b>	<b>3,040.3</b>	<b>24.6</b>	<b>100.8</b>
<b>Operating Expenses</b>	<b>2,994.3</b>	<b>2,978.1</b>	<b>16.1</b>	<b>100.5</b>
<b>Operating Expenses for Electric Power Business</b>	<b>2,942.9</b>	<b>2,923.0</b>	<b>19.9</b>	<b>100.7</b>
Personnel	185.6	166.0	19.6	111.8
Fuel	1,285.9	1,366.9	-80.9	94.1
Maintenance	129.6	121.6	8.0	106.6
Depreciation	304.3	312.0	-7.7	97.5
Power Purchasing	492.0	470.4	21.6	104.6
Taxes, etc.	174.4	173.6	0.7	100.4
Nuclear Power Back-end	33.0	24.8	8.2	133.0
Other	337.7	287.3	50.4	117.5
<b>Operating Expenses for Incidental Business</b>	<b>51.3</b>	<b>55.1</b>	<b>-3.7</b>	<b>93.2</b>
<b>Non-operating Expenses</b>	<b>70.7</b>	<b>62.2</b>	<b>8.4</b>	<b>113.6</b>
Interest Paid	51.5	57.3	-5.8	89.8
Other Expenses	19.2	4.8	14.3	393.3
<b>Extraordinary Loss</b>	<b>445.9</b>	<b>252.6</b>	<b>193.3</b>	<b>—</b>

**Personnel expenses (¥166.0 billion to ¥185.6 billion) +¥19.6 billion**

Salary and benefits (¥122.5 billion to ¥130.9 billion) +¥8.4 billion

Retirement benefits (¥8.0 billion to ¥19.9 billion) +¥11.9 billion

Amortization of actuarial difference ¥11.7 billion (-¥4.4 billion to ¥7.2 billion)

**<Amortization of Actuarial Difference>**

(Unit Billion yen)

	Expenses incurred	Expenses/Provisions in Each Period				Amount Uncharged as of Sep. 30, 2014
		FY2013		FY2014		
		Charged	Of which charged in first half	Charged	Of which charged in first half	
FY2011	2.5	0.8	0.4	-	-	-
FY2012	-29.2	-9.7	-4.8	-9.7	-4.8	-4.8
FY2013	72.8	24.2	-	24.2	12.1	36.4
<b>Total</b>		15.3	-4.4	14.5	7.2	31.5

Note: Actuarial gain and loss are amortized by the straight-line method over three years.

**Fuel expenses (¥1,366.9 billion to ¥1,285.9 billion) -¥80.9 billion**

Consumption volume Approx. -¥65.0 billion

Decrease in total power generated and purchased Approx. -¥65.0 billion

Price Approx. -¥16.0 billion

Increase due to fluctuations of CIF crude oil price and foreign expenses Approx. ¥43.0 billion

Decrease due to thermal efficiency Approx. -¥59.0 billion

<b>Maintenance expenses (¥121.6 billion to ¥129.6 billion)</b>		<b>+¥8.0 billion</b>
Generation facilities (¥40.3 billion to ¥50.1 billion)		<b>+¥9.8 billion</b>
Hydroelectric power (¥3.5 billion to ¥3.5 billion)	+¥0.0 billion	
Thermal power (¥31.8 billion to ¥35.3 billion)	+¥3.5 billion	
Nuclear power (¥4.8 billion to ¥11.1 billion)	+¥6.3 billion	
Renewable energy (¥0.1 billion to ¥0.1 billion)	-¥0.0 billion	
Distribution facilities (¥79.5 billion to ¥77.9 billion)		<b>-¥1.5 billion</b>
Transmission (¥8.8 billion to ¥10.0 billion)	+¥1.2 billion	
Transformation (¥5.4 billion to ¥5.5 billion)	+¥0.0 billion	
Distribution (¥65.2 billion to ¥62.3 billion)	-¥2.8 billion	
Others (¥1.7 billion to ¥1.5 billion)		<b>-¥0.2 billion</b>

<b>Depreciation expenses (¥312.0 billion to ¥304.3 billion)</b>		<b>-¥7.7 billion</b>
Generation facilities (¥139.3 billion to ¥137.5 billion)		<b>-¥1.7 billion</b>
Hydroelectric power (¥17.6 billion to ¥18.2 billion)	+¥0.5 billion	
Thermal power (¥82.0 billion to ¥82.1 billion)	+¥0.0 billion	
Nuclear power (¥39.3 billion to ¥36.9 billion)	-¥2.3 billion	
Renewable energy (¥0.3 billion to ¥0.2 billion)	-¥0.0 billion	
Distribution facilities (¥167.3 billion to ¥161.7 billion)		<b>-¥5.6 billion</b>
Transmission (¥78.8 billion to ¥76.8 billion)	-¥1.9 billion	
Transformation (¥31.0 billion to ¥29.6 billion)	-¥1.4 billion	
Distribution (¥57.4 billion to ¥55.2 billion)	-¥2.2 billion	
Others (¥5.3 billion to ¥4.9 billion)		<b>-¥0.3 billion</b>

### <Depreciation Breakdown>

	FY2013 1H	FY2014 1H
Regular depreciation	¥283.8 billion	¥300.7 billion
Extraordinary depreciation	-	-
Trial operations depreciation	¥28.2 billion	¥3.5 billion

### Regular depreciation and Trial operations depreciation

Thermal : Increase in regular depreciation and decrease in trial operations depreciation mainly due to commencement of commercial operations at Unit 2 of Hitachinaka Thermal Power Station and Unit 6 of Hirono Thermal Power Station in December 2013 after the trial operations from April the same year.

**Power purchasing costs (¥470.4 billion to ¥492.0 billion) +¥21.6 billion**

Power purchased from other utilities (¥107.8 billion to ¥101.7 billion)  
 Power purchased from other suppliers (¥362.6 billion to ¥390.2 billion)

Main Factors for Increase/Decrease

Power purchased from other suppliers: Increase due to additional purchases from photovoltaic power generation facilities, and others

-¥6.0 billion  
 +¥27.6 billion

**Taxes and other public charges (¥173.6 billion to ¥174.4 billion) +¥0.7 billion**

Tax for promotion of power-resources development (¥52.2 billion to ¥50.9 billion)  
 Enterprise tax (¥33.2 billion to ¥34.3 billion)  
 Property tax (¥57.5 billion to ¥58.1 billion)

-¥1.2 billion  
 +¥1.0 billion  
 +¥0.6 billion

**Nuclear power back-end costs (¥24.8 billion to ¥33.0 billion) +¥8.2 billion**

Decommissioning costs of nuclear power units (¥ - billion to ¥8.2 billion)

+¥8.2 billion

**Other expenses (¥287.3 billion to ¥337.7 billion) +¥50.4 billion**

Payment of Act on Special Measures Concerning Procurement of Renewable Electric Energy by Operators of Electric Utilities (¥38.9 billion to ¥77.2 billion)  
 Outsourcing expenses (¥86.3 billion to ¥101.1 billion)

Main Factors for Increase/Decrease

Payment on Act of Renewable Electric Energy: Increase due to rise in the unit price of the renewable power promotion surcharge, and others

+¥38.3 billion  
 +¥14.7 billion

**Incidental business operating expenses (¥55.1 billion to ¥51.3 billion) -¥3.7 billion**

Energy facility service business (¥0.7 billion to ¥0.6 billion)  
 Real estate leasing business (1.7 billion to ¥1.5 billion)  
 Gas supply business (¥51.2 billion to ¥47.6 billion)  
 Other incidental business (¥1.3 billion to ¥1.5 billion)

Main Factors for Increase/Decrease

Gas supply business: Decrease in sales volume, and others

-¥0.0 billion  
 -¥0.1 billion  
 -¥3.6 billion  
 +¥0.1 billion

**Interest paid (¥57.3 billion to ¥51.5 billion) -¥5.8 billion**

Decrease in average rate during the period (1.47% to 1.37%)  
 Decrease in the amount of interest-bearing debt (¥7,697.0 billion to ¥7,326.1 billion)

-¥3.7 billion  
 -¥2.0 billion

**Other non-operating expenses (¥4.8 billion to ¥19.2 billion) +¥14.3 billion**

Miscellaneous expenses (¥4.3 billion to ¥19.1 billion)

Main Factors for Increase/Decrease

Miscellaneous expenses: Increase in foreign exchange loss, and others

+¥14.8 billion

**Extraordinary Loss (¥252.6 billion to ¥445.9 billion) +¥193.3 billion**

Expenses for Nuclear Damage Compensation (¥230.5 billion to ¥445.9 billion)  
 Loss on disaster (¥22.0 billion to ¥ - billion)

+¥215.4 billion  
 -¥22.0 billion



# Balance Sheets (Consolidated and Non-Consolidated)

(Upper and lower rows show consolidated and non-consolidated figures, respectively) (Unit: Billion yen)

		Sep. 30	Mar. 31	Comparison	
		2014 (A)	2014 (B)	(A)-(B)	(A)/(B) (%)
<b>Total Assets</b>	(Consolidated)	14,276.7	14,801.1	-524.3	96.5
	(Non-consolidated)	13,859.8	14,369.8	-509.9	96.5
Fixed Assets		11,761.2	12,133.2	-371.9	96.9
		11,613.2	11,979.6	-366.3	96.9
(*)	Electricity Business	7,305.0	7,220.0	84.9	101.2
	Incidental Business	38.2	39.6	-1.3	96.5
	Non-Business	1.5	1.6	-0.1	93.5
	Construction in Progress	616.5	851.1	-234.6	72.4
	Nuclear Fuel	778.5	785.6	-7.0	99.1
	Others	2,873.3	3,081.4	-208.1	93.2
Current Assets		2,515.4	2,667.8	-152.4	94.3
		2,246.6	2,390.2	-143.5	94.0
<b>Liabilities</b>		12,406.2	13,223.6	-817.4	93.8
		12,358.1	13,139.8	-781.6	94.1
Long-term Liability		10,599.8	11,279.6	-679.8	94.0
		10,495.9	11,163.0	-667.1	94.0
Current Liability		1,801.0	1,938.8	-137.8	92.9
		1,856.8	1,971.5	-114.7	94.2
Reserves for Preparation of the Depreciation of Nuclear Plants Construction		5.4	5.1	0.2	104.7
		5.4	5.1	0.2	104.7
<b>Net assets</b>		1,870.4	1,577.4	293.0	118.6
		1,501.6	1,230.0	271.6	122.1
Shareholders' Equity		1,891.2	1,602.1	289.1	118.0
		1,503.2	1,232.2	270.9	122.0
Valuation, Translation Adjustments and Others		-48.8	-52.0	3.1	—
		-1.5	-2.2	0.7	—
Minority Interests		28.0	27.2	0.7	102.9
		—	—	—	—
(*) Non-consolidated					
Interest-bearing Debt Outstanding		7,348.2	7,629.7	-281.4	96.3
		7,326.1	7,600.0	-273.8	96.4
Equity Ratio (%)		12.9	10.5	2.4	—
		10.8	8.6	2.2	—

Others in fixed assets include grants-in-aid receivable from Nuclear Damage Compensation and Decommissioning Facilitation Corporation of 925.8 billion yen.

## <Interest-bearing debt outstanding>

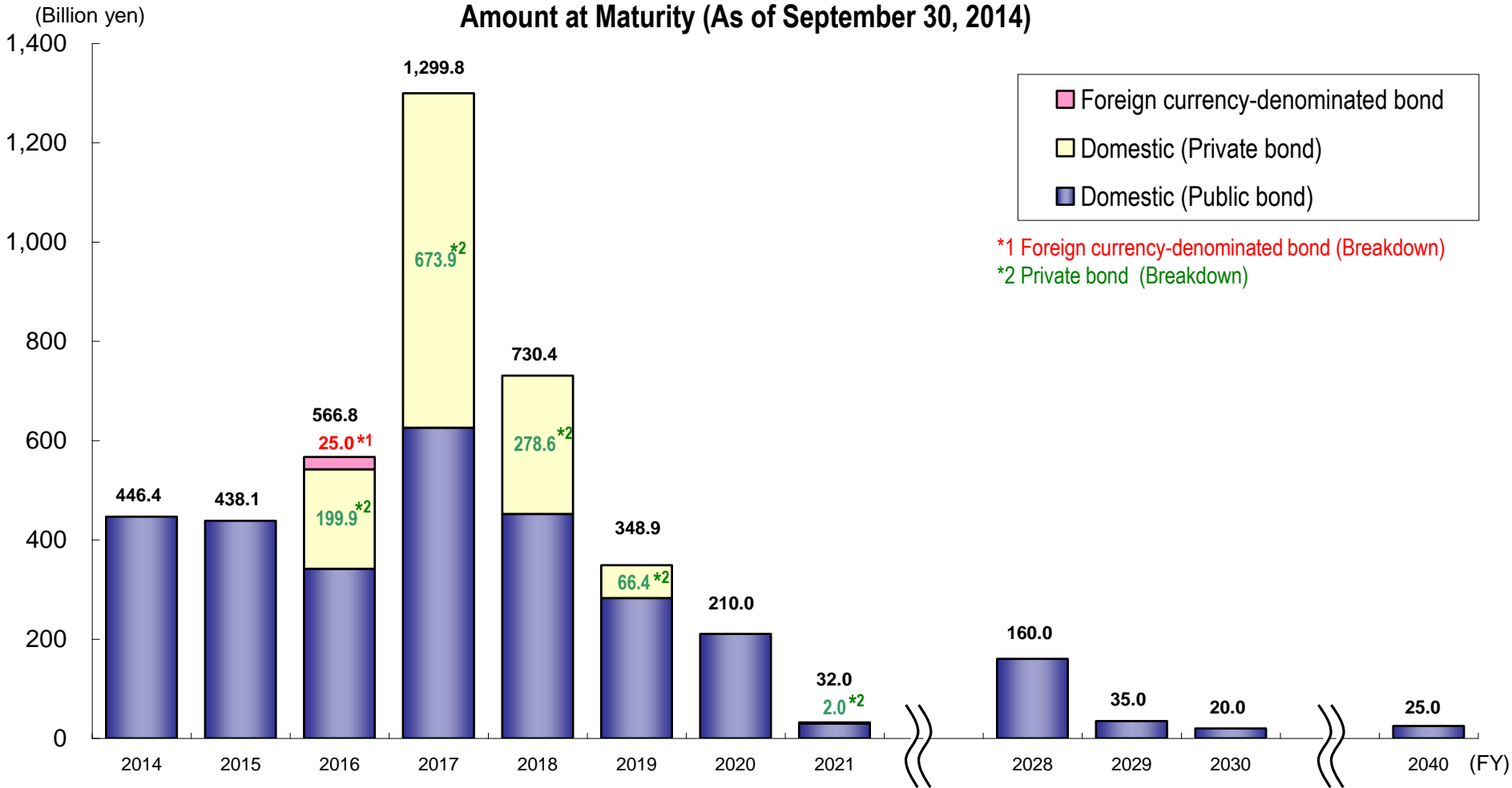
(Unit: Billion yen)

	Sep. 30, 2014	Mar. 31, 2014
Bonds	4,038.8	4,247.8
	4,038.8	4,247.8
Long-term debt	3,214.2	3,371.4
	3,194.0	3,343.6
Short-term debt	95.2	10.4
	93.3	8.4
Commercial paper	-	-
	-	-

Note: Upper and lower rows show consolidated and non-consolidated figures, respectively

	(Unit: Billion yen)		
	FY2014 (A)	FY2013 (B)	Comparison
	First Half	First Half	(A)-(B)
<b>Cash flow from operating activities</b>	313.2	116.2	197.0
Income / loss before income taxes and minority interests	309.1	629.4	-320.2
Depreciation and amortization	314.1	322.1	-7.9
Interest expenses	51.5	57.5	-5.9
Grants-in-aid from Nuclear Damage Compensation and Decommissioning Facilitation Corporation	-512.5	-666.2	153.6
Expenses for nuclear damage compensation	445.9	230.5	215.4
Gains on sales of fixed assets	—	-74.2	74.2
Decrease (increase) in notes and accounts receivable trade*	-82.7	-134.7	51.9
Increase (decrease) in notes and accounts payable trade**	-89.0	-78.4	-10.5
Interest expenses paid	-52.5	-56.9	4.3
Payments for extraordinary loss on disaster due to the Tohoku-Chihou-Taiheiyou-Oki Earthquake	-51.2	-50.1	-1.1
Grants-in-aid from Nuclear Damage Compensation and Decommissioning Facilitation Corporation received	688.6	817.0	-128.4
Payments for nuclear damage compensation	-677.5	-872.6	195.1
Others	-30.4	-6.8	-23.6
<b>Cash flows from investing activities</b>	-340.8	-40.3	-300.5
Purchases of property, plant and equipment	-273.9	-304.3	30.4
Proceeds from sales of fixed assets	3.9	76.9	-73.0
Payments of investment and loans receivable	-38.2	-58.1	19.8
Proceeds from investments and loans receivable	38.1	59.3	-21.2
Payments into time deposits	-185.3	-59.3	-126.0
Proceeds from withdrawal of time deposits	107.3	241.6	-134.2
Others	7.2	3.4	3.7
<b>Cash flows from financing activities</b>	-283.6	-200.9	-82.7
Proceeds from issuance of bonds	64.8	89.2	-24.3
Redemption of bonds	-273.9	-193.3	-80.5
Proceeds from long-term loans	20.9	35.5	-14.5
Repayment of long-term loans	-177.7	-130.7	-46.9
Proceeds from short-term loans	94.1	10.3	83.8
Repayment of short-term loans	-9.3	-10.3	1.0
Others	-2.7	-1.5	-1.1
Effect of exchange rate changes on cash and cash equivalents	-0.6	4.7	-5.4
Net increase (decrease) in cash and cash equivalents**	-311.9	-120.2	-191.6
Cash and cash equivalents at beginning of the year	1,564.0	1,514.5	49.4
Cash and cash equivalents at end of the quarter	1,252.1	1,394.2	-142.1

\* Minus denotes an increase. \*\* Minus denotes a decrease.



Note: The amount redeemed for first half of FY2014 totaled 273.9 billion yen.



(Unit: Billion yen)

	FY2014 (A)	FY2013 (B)	Comparison	
	First Half	First Half	(A) - (B)	(A)/(B) (%)
<b>Operating Revenues</b>	3,334.1	3,216.1	118.0	103.7
Fuel & Power Company	1,698.6	1,614.3	84.2	105.2
	49.8	57.4	-7.6	86.7
Power Grid Company	779.9	809.8	-29.8	96.3
	59.1	53.2	5.9	111.1
Customer Service Company	3,301.7	3,178.5	123.1	103.9
	3,197.7	3,074.4	123.3	104.0
Corporate	178.7	316.8	-138.0	56.4
	27.4	31.0	-3.6	88.3
<b>Operating Expenses</b>	3,050.8	3,048.9	1.9	100.1
Fuel & Power Company	1,494.6	1,583.2	-88.5	94.4
Power Grid Company	696.1	705.9	-9.7	98.6
Customer Service Company	3,106.5	3,109.7	-3.2	99.9
Corporate	378.6	353.9	24.6	107.0
<b>Operating Income</b>	283.3	167.2	116.0	169.4
Fuel & Power Company	203.9	31.1	172.8	655.4
Power Grid Company	83.8	103.9	-20.1	80.6
Customer Service Company	195.1	68.7	126.4	284.0
Corporate	-199.8	-37.1	-162.7	—

Note1: The lower row in operating revenues section represents revenues from external customers.

Note2: TEPCO expanded the application range of management control system based on in-house companies to the whole TEPCO Group in FY2014, and the operational control over affiliated companies have been taken by the related in-house company or corporate. In response to this policy change, TEPCO's reported segments have been modified to four segments (previously five) that are "Fuel & Power," "Power Grid," "Customer Service," and "Corporate" from FY2014. Accordingly, every affiliated company which was reported in same one segment called "Others" in FY2013 has been put into any of those four segments.

# [Reference] Seasonal Breakdown of Electricity Sales - Sales Volume, Total Power Generated and Purchased

(Units: Billion kWh, %)

Electricity Sales Volume	FY2013			FY2014						
	1st Half	2nd Half	Full year	Apr.	May	Jun.	Jul.	Aug.	Sep.	1st Half
Regulated segment	48.84 (-1.6)	56.24 (-0.5)	105.08 (-1.0)	8.01 (0.6)	7.21 (-3.9)	6.35 (-0.3)	7.66 (-1.4)	9.45 (-4.9)	7.60 (-18.4)	46.27 (-5.3)
Lighting	43.42 (-1.4)	51.14 (-0.2)	94.57 (-0.7)	7.28 (0.8)	6.48 (-3.8)	5.65 (-0.1)	6.78 (-1.1)	8.31 (-4.7)	6.75 (-18.0)	41.25 (-5.0)
Low voltage	4.52 (-3.6)	4.33 (-2.7)	8.85 (-3.2)	0.59 (-0.6)	0.55 (-4.0)	0.57 (1.1)	0.75 (-2.8)	0.99 (-5.2)	0.75 (-23.3)	4.20 (-7.2)
Others	0.90 (-4.3)	0.76 (-5.4)	1.66 (-4.8)	0.14 (-2.4)	0.18 (-7.7)	0.14 (-12.8)	0.14 (-9.6)	0.14 (-9.0)	0.10 (-5.7)	0.82 (-8.1)
Liberalized segment	82.83 (-1.0)	78.78 (-0.5)	161.61 (-0.8)	12.66 (-0.3)	12.24 (-1.7)	13.28 (-1.1)	13.97 (-3.3)	14.64 (-2.8)	13.71 (-7.1)	80.50 (-2.8)
Commercial use	35.02 (-1.7)	32.76 (-2.9)	67.78 (-2.3)	5.11 (-1.1)	4.83 (-3.2)	5.36 (-1.6)	5.78 (-4.9)	6.54 (-3.9)	5.84 (-10.7)	33.46 (-4.5)
Industrial use and others	47.82 (-0.5)	46.02 (1.3)	93.83 (0.3)	7.55 (0.3)	7.41 (-0.8)	7.93 (-0.8)	8.18 (-2.1)	8.11 (-1.8)	7.87 (-4.2)	47.05 (-1.6)
<b>Total electricity sales volume</b>	<b>131.68 (-1.3)</b>	<b>135.01 (-0.5)</b>	<b>266.69 (-0.9)</b>	<b>20.67 (0.1)</b>	<b>19.44 (-2.5)</b>	<b>19.64 (-0.8)</b>	<b>21.63 (-2.6)</b>	<b>24.09 (-3.6)</b>	<b>21.31 (-11.5)</b>	<b>126.78 (-3.7)</b>

Note: Figures in parentheses denote percentage change from the previous year. Rounded to the nearest decimal point.

(Units: Billion kWh, %)

Total Power Generated and Purchased	FY2013			FY2014						
	1st Half	2nd Half	Full year	Apr.	May	Jun.	Jul.	Aug.	Sep.	1st Half
Total power generated and purchased	141.70 (-1.0)	146.66 (0.1)	288.36 (-0.5)	20.89 (-2.3)	20.83 (-2.6)	21.90 (-0.3)	25.04 (-4.1)	25.57 (-6.6)	21.36 (-8.9)	135.59 (-4.3)
Power generated by TEPCO	114.08	122.12	236.20	17.25	16.91	17.66	20.04	20.54	16.69	109.09
Hydroelectric power generation	6.31	4.25	10.56	1.05	1.15	1.12	1.18	1.14	0.83	6.47
Thermal power generation	107.75	117.84	225.59	16.20	15.75	16.54	18.85	19.40	15.85	102.59
Nuclear power generation	-	-	-	-	-	-	-	-	-	-
Renewable Energy	0.02	0.03	0.05	0.00	0.01	0.00	0.01	0.00	0.01	0.03
Power purchased from other companies	28.92	25.90	54.82	3.72	4.02	4.34	5.12	5.31	4.77	27.28
Used at pumped storage	-1.30	-1.36	-2.66	-0.08	-0.10	-0.10	-0.12	-0.28	-0.10	-0.78

Note: Figures in parentheses denote percentage change from the previous year.

- Electricity sales volume to large-scale industrial customers in the first half of fiscal 2014 decreased 1.7% due to decrease year-on-year sales growth in industries such as Paper & pulp, Chemicals, Ceramics & stone and Machinery.

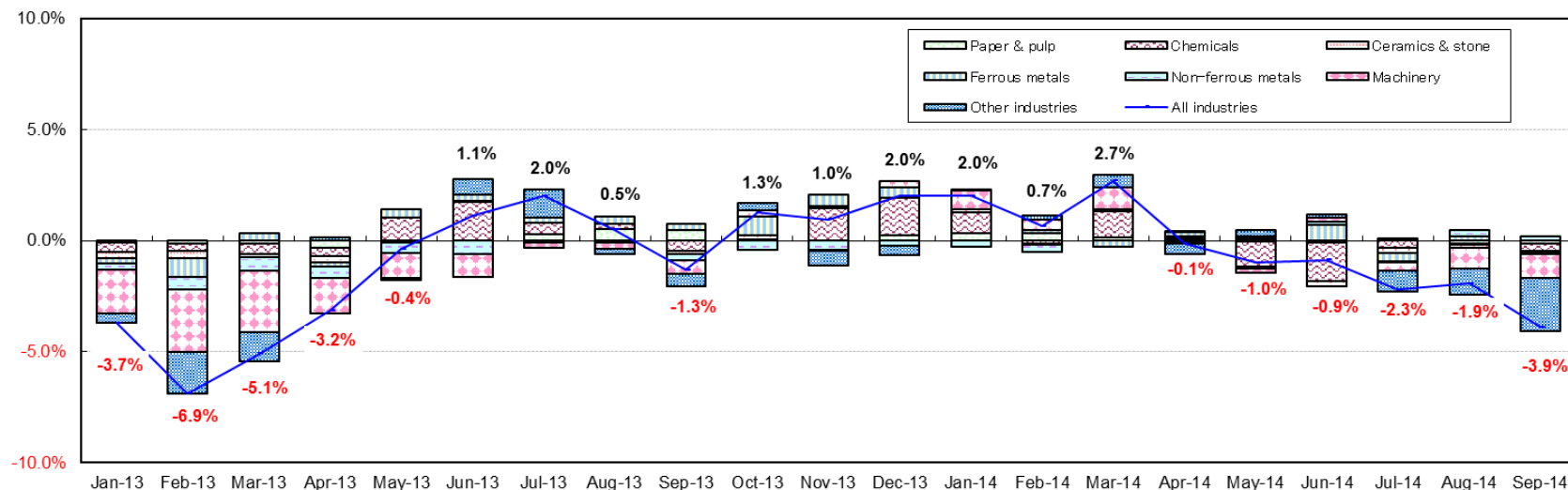
## [Year-on-year Electricity Sales Growth in Large Industrial Customer Segment]

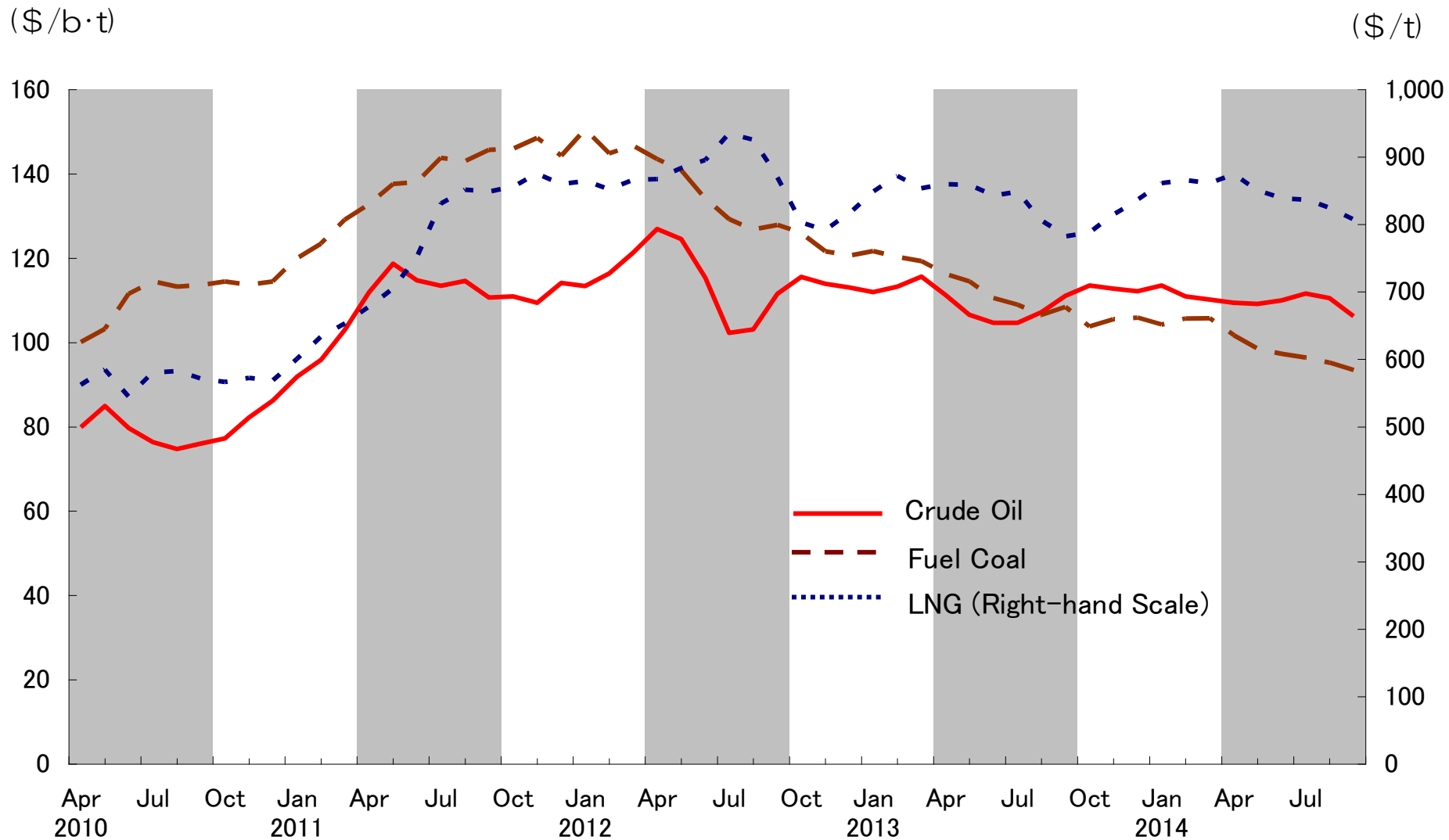
(Unit: %)

	FY2013					FY2014						
	1st Half	3rd Quarter	4th Quarter	2nd Half	Full Year	Apr.	May	Jun.	Jul.	Aug.	Sep.	1st Half
Paper & pulp	5.2	2.8	8.4	5.5	5.4	2.5	-1.2	-3.4	2.8	-4.9	-3.9	-1.4
Chemicals	3.8	8.5	5.5	7.0	5.4	1.0	-9.1	-13.8	-3.6	-0.1	-2.8	-4.8
Ceramics & stone	-2.3	2.9	1.6	2.3	-0.1	-1.6	-2.1	-7.1	-8.1	-6.7	-4.8	-5.2
Ferrous metals	2.1	5.7	-0.2	2.7	2.4	1.5	0.8	6.6	-3.7	1.9	-0.4	1.2
Non-ferrous metals	-6.7	-7.0	-3.7	-5.4	-6.1	1.3	2.3	3.4	-1.7	7.2	3.9	2.7
Machinery	-3.8	0.9	3.8	2.3	-0.9	-0.5	-1.1	0.9	-1.6	-4.6	-5.1	-2.1
Other industries	0.4	-0.5	0.6	0.0	0.2	-1.0	0.6	0.3	-2.0	-2.3	-5.1	-1.7
<b>Total for Large Industrial Customers</b>	<b>-0.2</b>	<b>1.4</b>	<b>1.8</b>	<b>1.6</b>	<b>0.7</b>	<b>-0.1</b>	<b>-1.0</b>	<b>-0.9</b>	<b>-2.3</b>	<b>-1.9</b>	<b>-3.9</b>	<b>-1.7</b>
<b>(Ref.) 10-company total</b>	<b>-1.2</b>	<b>1.9</b>	<b>2.9</b>	<b>2.4</b>	<b>0.5</b>	<b>0.8</b>	<b>-0.0</b>	<b>-0.1</b>	<b>-1.1</b>	<b>-2.1</b>	<b>-1.5</b>	<b>-0.7</b>

Note: Preliminary figures for September and the first half of FY2014.

## [Contribution Analysis on Sales Volume Growth in Large Industrial Customers Segment]



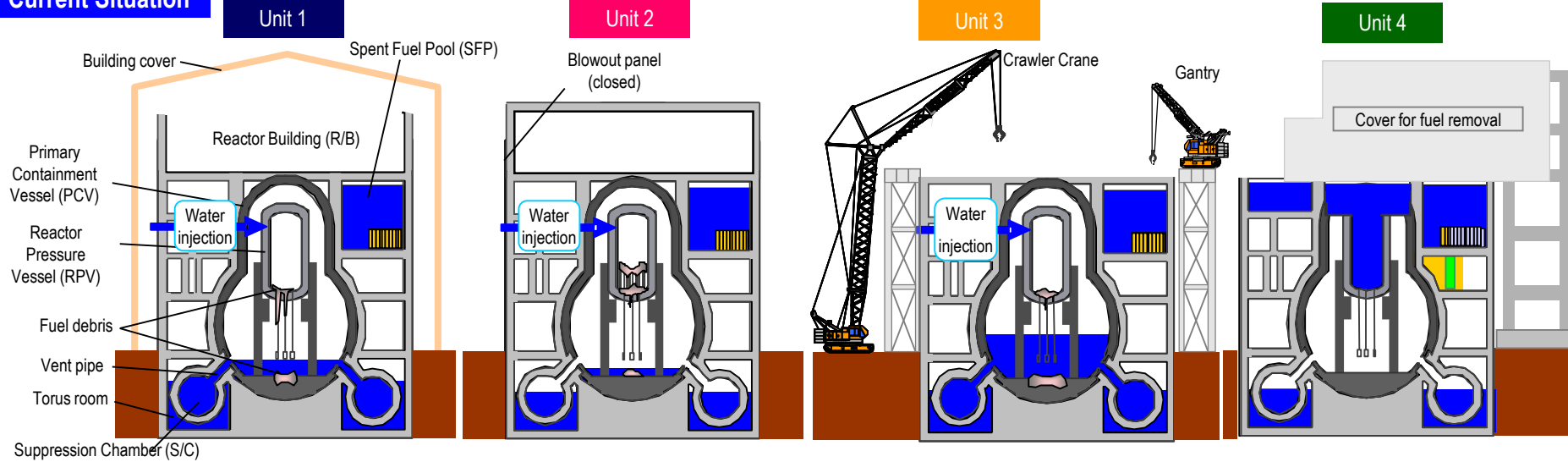


Note: Preliminary figures are used for September, 2014.

# [Reference] The Current Status of Fukushima Daiichi Nuclear Power Stations and Future Initiatives

- At Units 1, 2 and 3, we continue water-cooling operations for their reactors and the temperatures of the reactors have been kept around 25 to 35 degrees centigrade.
- There was no significant change in the density of radioactive materials newly released from Reactor Buildings in the air. It was evaluated that the comprehensive cold shutdown condition had been maintained.
- We continue circulatory water-cooling systems for spent fuel pools of Units 1 through 4, and the temperatures of the pools have been kept around 15 to 25 degrees centigrade.

## Current Situation



Reactor (as of Oct. 29, 2014 11:00 am)	Temperature of the bottom of RPV: 25.8°C/ Temperature of the inside of PCV: 26.0°C	32.6°C / 34.5°C	31.1°C / 30.7°C	No Fuel at the time of accident
SFP (as of Oct. 29, 2014 11:00 am)	21.5°C	18.8°C	17.0°C	17.0°C
Works related to reactor buildings	<ul style="list-style-type: none"> <li>● Dismantling of Reactor Building cover               <ul style="list-style-type: none"> <li>- Prior to dismantling the building cover carried out from the end of this fiscal year, anti-scattering agents started to be sprayed on October 22, 2014.</li> <li>- After removing the roof panel, dust-trend monitoring will be implemented for a certain period of time, followed by investigation of rubble condition and measurement of dust density.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Replacement of the thermometer at the bottom of the RPV               <ul style="list-style-type: none"> <li>- In April, attempts to remove and replace the broken thermometer at the bottom of the RPV failed and the operation was suspended. In August, it was confirmed that removal was impossible due to rust. Rust-stripping chemicals also capable of alleviating drawing tension are currently being selected.</li> <li>- After confirming the ability of the rust-stripping chemicals to strip rust, working to check whether the mock-up test equipment can eliminate the thermometer or not and verifying the method, the removal will be implemented in late November.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Removal of rubble fell into Spent Fuel Pool               <ul style="list-style-type: none"> <li>- During rubble removal inside the spent fuel pool to facilitate fuel removal, the console and other components of the fuel-handling machine fell into the pool on August 29. Though the console fell first onto the cover materials and then onto the fuel rack, analytical results on pool water quality showed little effect on the fuel.</li> <li>- Before resuming rubble removal, decontamination work at the operating floor will be carried out.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Fuel Removal               <ul style="list-style-type: none"> <li>- Removal of fuel from the spent fuel pool commenced on November 18, 2013.</li> <li>- Fuel removal was suspended from July 1 for the annual inspection of overhead cranes, and resumed from September 4.</li> <li>- As of the end of work on October 29, 1,320 out of 1,331 spent fuel assemblies and 22 out of 202 non-irradiated fuel assemblies had been transferred to the common pool.</li> </ul> </li> </ul>

- TEPCO released "Mid-to-long Term Roadmap" towards the decommissioning of Fukushima Daiichi Nuclear Power Station Units 1 through 4 on December 21, 2011 (revised on July 30, 2012 and June 27, 2013). Based on the roadmap, TEPCO, jointly with the national government, is advancing its efforts to maintain the units' stabilization and to decommission them in safe.
- While the task contains unprecedented technical difficulties, we will promote the necessary R&D with domestic and international cooperation and target the ultimate completion of the decommissioning work within 30 to 40 years
- On August 18, 2014, Nuclear Damage Compensation and Decommissioning Facilitation Corporation (NDF) was established. NDF formulates strategic plan of important issues including fuel debris removal and waste management. TEPCO shows a specific work plan of important issues to NDF and receives advice and support for schedule control.

## 1. Basic Principles for Mid-to-long Term initiatives

- [Principle 1] Systematically tackle the issues while placing top priority on the safety of local citizens and workers.
- [Principle 2] Move forward while maintaining transparent communications with local and national citizens to gain their understanding and respect.
- [Principle 3] Continuously update the roadmap in consideration of the on-site situation and the latest R&D result.
- [Principle 4] Harmonize the efforts of TEPCO and the Government of Japan to achieve the goals indicated in this Roadmap. The Government of Japan should take the initiative in promoting the efforts to implement decommissioning measures safely and steadily.

## 2. Main Points of the Roadmap

- (1) Review schedules based on the condition of each unit
  - Prepare multiple plans for the removal of the fuel and fuel debris in order to make it possible to take measures flexibly depending on the on-site situation
- (2) Strengthen communications with local people and across all levels of society
  - Valuable opinions requiring improvement of the provision of information, communications, decommissioning and contaminated water issue were expressed through the "Meeting of the Fukushima Advisory Board on Decommissioning and Contaminated Water Management".
- (3) Develop a comprehensive structure to gather international expertise
  - Appoint international advisors who provide advice to the R&D management organization and establish an international collaboration department in the organization and an international decommissioning expert group consisting of foreign experts in various fields, develop an environment which facilitates the participation of foreign research institutes and companies in the decommissioning work, etc.

<Schedules for removal of fuel and fuel debris of each unit>

	Fuel removal (Spent fuel pools)	Fuel debris removal (Reactors)
Unit 1 (Earliest plan)	Second half of FY2017	First half of FY2020
Unit 2 (Earliest plan)	Second half of FY2017	First half of FY2020
Unit 3 (Earliest plan)	First half of FY2015	Second half of FY2021
Unit 4	Start from November 2013 (one month earlier than the initial plan)	-

<Major Judgment Points on the Roadmap>

Primary Targets	Phase 2								Phase 3		
	Period up to the commencement of the removal of the fuel debris								Period up to the completion of decommissioning measures		
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022-		
								Within 10 years	After 20-25 years	After 30-40 years	
Plan for Maintaining Plant in an Ongoing Stable State	HP	✓ Verification of status of installation of shielding walls on the landward side	✓ Solving technical issues in installation of shielding walls on the landward side								HP = Judgment Point
Main Progress	HP	✓ Selection of plans for removal of fuel and fuel debris (1st half of 2014 - 1st half of 2015)			HP	✓ Determination of methods for removal of fuel debris (1st half of 2018 - 1st half of 2021)					
Plan for Fuel Removal from Spent Fuel Pool						HP	✓ Determination of methods for processing and storing spent fuel				
Plan for Fuel Debris Removal*			HP	HP							
	✓ Determination of methods for repairing lower parts of the PCV and for stopping water leakage			✓ Determination of methods for repairing upper parts of the PCV and for stopping water leakage							
			HP	HP	HP	HP	✓ Completion of preparation for fuel debris containers, etc	✓ Completion of flooding of upper parts of the PCV	✓ Determination of methods for the RPV internal investigation		
									HP	✓ Determination of processing/disposal methods of fuel debris	
Plan for Storage and Maintenance, Processing/Disposal of Radioactive Waste and Decommissioning of Reactors				HP	✓ Collection of basic approach for processing/disposal of waste			HP	HP	✓ Installation of equipment for blocks waste production and prospects on waste disposal	
		HP	✓ Formation of the scenario for decommissioning				HP	HP	HP	✓ Determination of specification and methods of waste blocks production	HP
						HP	HP	HP	HP	✓ Prospects on waste disposal	HP
							HP	HP	HP	✓ Completion of necessary R&D	

\* Plan for the unit with the earliest schedule (Unit 2).

Source: Council for the Decommissioning of TEPCO's Fukushima Daiichi NPS (Jun. 27, 2013)



- The Nuclear Disaster Response Headquarters of the government has established the “Basic policy on the contaminated water issues at Fukushima Daiichi Nuclear Power Station of Tokyo Electric Power Company” on September 3, 2013. Additionally, it has also arranged the “Preventive and Multilayered Measures for Contaminated Water Treatment at the Fukushima Daiichi Nuclear Power Station of Tokyo Electric Power Company” on December 20, 2013 to speed up and improve the reliability of decommissioning and its measures to deal with contaminated water problems.
- TEPCO has established “Fukushima Daiichi Decontamination & Decommissioning Engineering Company” on April 1, 2014, for the purpose of clarifying the responsibilities allocation and focusing solely on handling of decommissioning and contaminated water. The countermeasures will continue to be implemented, aiming at purifying contaminated water (concentrated RO brine) in tanks by the end of FY2014.

## <Preventative and multilayered measures for contaminated water treatment>

(Source) Ministry of Economy, Trade and Industry's Publication

### 1) Remove sources of contamination

[Measures taken to date]

- Remove contaminated water in the trenches and isolate the trenches
- Treat contaminated water with multi-nuclide removal equipment
- Install high performance multi-nuclide removal equipment at government expenditure

[Key additional measures]

- Install additional multi-nuclide removal equipment
- Take measures to prevent water leakage from tanks
- Clean up sea water in the harbor

### 2) Isolate water from contamination

[Measures taken to date]

- Pump up groundwater for by-passing
- Pump up ground water from sub-drains (wells nearby reactor buildings)
- Install land-side frozen soil impermeable walls at government expenditure
- Pave the area between building and sea

[Key additional measures]

- Install gutters at top of tanks
- Implement broader area pavement (surface waterproofing) in the site or limited area pavement with an impermeable enclosure

### 3) Prevent leakage of contaminated water

[Measures taken to date]

- Improve soil with sodium silicate
- Install further tanks (replace flange tanks with welded-joint tanks)
- Install sea-side impermeable walls

[Key additional measures]

- Accelerate installation of welded-joint tanks
- Prepare countermeasures against large tsunami (e.g. install watertight doors into buildings)
- Prevent contaminated water leakage from buildings
- Reduce length of contaminated water transfer piping

## <Progress status>

- As for closing seawater pipe trenches, injection of space filling started on October 16, in order to reinforce countermeasures for freezing the connection between trenches and building to stop water leakage. The plan to remove contaminated water in the trenches after building separation by the freezing connection will move forward from November.
- Hot tests\* of the existing multi-nuclide removal equipment (ALPS) are currently underway, aiming at full-scale operation around this December. Regarding additional ALPS, hot tests of three systems are currently underway, beginning from A system on September 17. Hot test of high-performance multi-nuclide removal equipment started on October 18, 2014. \*The tests using radioactive water
- Start pumping up groundwater from the well for the by-passing on April 9, 2014. Releasing the pumped-up groundwater to the ocean commenced from May 21. It was estimated that the groundwater inflow into the buildings had decreased by approx. 100-130ton/day compared to the data before September 16 due to combined effect of the inflow control measures such as groundwater bypass and water-stoppage of the High Temperature Incinerator Building. Evaluation will be continued because the inflow fluctuates.
- Frozen-soil impermeable walls surrounding the buildings are being installed, with freezing targeted to start at the end of this fiscal year. As of September 23, drilling of 462 of 1,545 frozen pipes and installation of 103 pipes had been completed. In addition, regarding chillers for freezing soil, installation of 13 of 30 units was completed.

- To facilitate prompt and fair compensation for nuclear damages, TEPCO continues to set and announce its own detailed compensation guidelines and procedures to individuals and business entities based on Government's Interim Guideline released in August 2011, Supplemental Interim Guideline released in December 2011, the second Supplemental Interim Guideline released in March 2012, the third Supplemental Interim Guideline released in January 2013 and the fourth Supplemental Interim Guideline released in December 2013 which comprehensively clarify certain types and ranges of damages to be compensated.
- Cumulative amount of compensations (including both permanent and temporary) already paid out totals approximately 4,385.2 billion yen as of October 24, 2014.

### <Types of damages presently compensated by TEPCO> (As of October 24, 2014)

	Types of Damages
Individual	<ul style="list-style-type: none"> <li>- Expenses for radiation inspection</li> <li>- Expenses for evacuation</li> <li>- Expenses for temporary return</li> <li>- Expenses for permanent return</li> <li>- Physical damages</li> <li>- Mental distress</li> <li>- Opportunity losses on salary of workers</li> <li>- Losses or damages on tangible assets</li> <li>- Damages caused by voluntary evacuations</li> <li>- Housing assurance damages</li> <li>- Expenses for voluntary decontamination (start on Sep.18, 2014), etc.</li> </ul>
Business Entities	<ul style="list-style-type: none"> <li>- Opportunity losses on businesses</li> <li>- Expenses for radiation inspection of commodity</li> <li>- Damages due to groundless rumor</li> <li>- Indirect business damages</li> <li>- Losses or damages on tangible assets</li> <li>- Expenses for voluntary decontamination (start on Sep.18, 2014), etc.</li> </ul>

### <Progress in Permanent Compensation Payout> (As of October 24, 2014)

	Individual	Individual (for voluntary evacuation)	Business Entities
Cumulative Number of Payouts for Permanent Compensation	approx. 593,000	approx. 1,288,000	approx. 252,000
Payout as Permanent Compensation (billion yen)	approx. 1,923.2	approx. 353.0	approx. 1,958.5

### <Cumulative Payout for Nuclear Damage Compensation> (As of October 24, 2014)

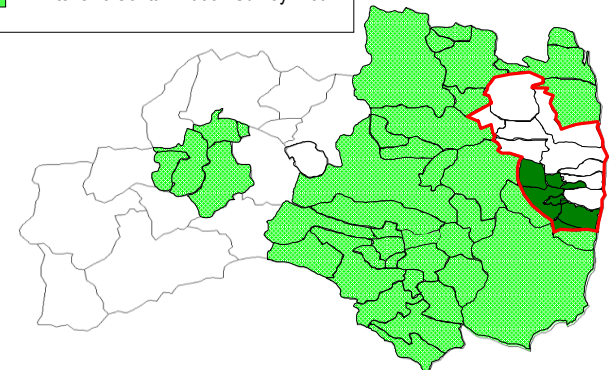
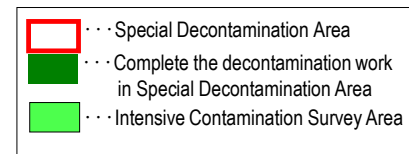
Payout as Permanent Compensation [1]	approx. 4,234.6 billion yen
Payout as Temporary Compensation [2]	approx. 150.5 billion yen
Payout in Total [1] + [2]	approx. 4,385.2 billion yen

- The Act on Special Measures Concerning the Handling of Radioactive Pollution (the “Act”) was enacted in August 2011 and fully came into force on January 1, 2012. The Act showed as follows; (1) The national and the local governments shall develop their decontamination plans and implement decontamination works based on the Act, (2) TEPCO as “the relevant nuclear operator” shall cooperate with the national and local governments to implement the measures they have adopted, (3) The expenses for decontamination shall be reimbursed by TEPCO.
- After that, separation of the roles of National Government and TEPCO was clarified in the cabinet decision on December 20, 2013, based on the policies that the business of decontamination and intermediate storage facilities would be accelerated while minimizing as far as possible the burden on the public purse, and at the same time providing a stable supply of power.
- As a party concerned in the nuclear power accident, TEPCO is committed to engaging in the decontamination works with utmost efforts in collaboration with the national and local governments.

### <Framework of decontamination based on the Act>

	Special Decontamination Area (11 Municipalities in Fukushima)	Intensive Contamination Survey Area (40 Municipalities in Fukushima, etc)
Area designation	Areas necessary to implement decontamination by the national government	Areas where the dose rate is over 0.23μSv/h and decontamination is to be implemented after the decontamination plans are formulated
Decontamination Plan	Formulated by the national government conferring with local government	Formulated by the local government
Body of implementation	The national government	The local government
Progress Status of decontamination work	<ul style="list-style-type: none"> <li>Completed the work in accordance with the plan at Tamura City in June, 2013, and at Naraha town, Kawauchi village and Okuma town in March, 2014</li> <li>Scheduled to be completed in other municipalities from FY2015 to 2016</li> </ul>	<ul style="list-style-type: none"> <li>Difference has been observed on the progress among municipalities since the plans and measures differ depending on the local circumstances of each municipality.</li> <li>Scheduled to be completed in most areas by the end of FY2016</li> </ul>

### <Reference: Decontamination Area in Fukushima Prefecture>



(Source) Ministry of the Environment's Publication

### <Clarification of Share of Roles between the National Government and TEPCO in the Cabinet Decision\* on December 20, 2013>

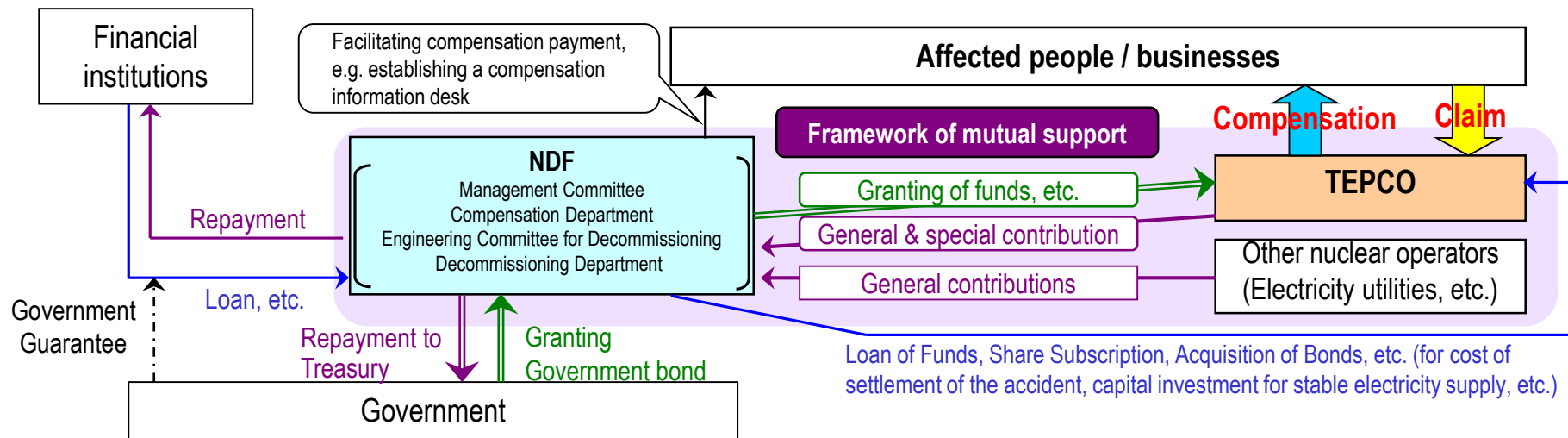
#### 【Basic Framework】

- Compensation should be paid properly under the responsibility of TEPCO. The expenses for decontamination and Interim Storage Facilities that was already conducted or planned at present are to be reimbursed by TEPCO after the completion of each work based on the Act.
- Assistance for the required funds is to be provided based on the Nuclear Damage Liability Facilitation Fund Act. (An expansion of the Government bond: 5 trillion yen to 9 trillion yen)

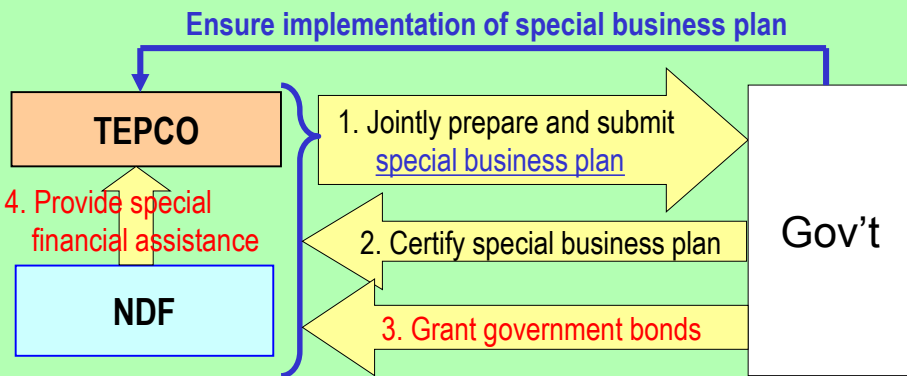
#### 【New Way to Share Burdens between the National Government and TEPCO】

- An equivalent sum of the expenses for decontamination work already conducted or planned at present: After a reimbursement is made by TEPCO, the plan is to recover it from the profit on sale of stocks of TEPCO held by the Nuclear Damage Liability Facilitation Fund (the “Fund”).
- An equivalent sum of the expenses for Interim Storage Facilities: After reimbursement is made by TEPCO, it will later be recovered from funds allocated from the Special Account for Energy Policy to the Fund. (No influence will be exerted on budgets for reconstruction funds and for the general account.)

- After the enactment of the Nuclear Damage Liability Facilitation Fund Act, the Fund was officially established in September 2011.
- Due to the partial revision of the Nuclear Damage Liability Facilitation Fund Act in May 2014, the Fund is to be reorganized into the "Nuclear Damage Compensation and Decommissioning Facilitation Corporation (NDF)".
- To receive a financial assistance of NDF, the nuclear operator is required to prepare/modify the special business plans jointly with NDF and receive the approval of the competent minister.



## <Special financial assistance system>



Note: When preparing a special business plan, NDF shall strictly evaluate TEPCO's assets, thoroughly review its business operations, and check that its request for cooperation of parties concerned is appropriate and sufficient.

## <Contents of special business plan>

1. Circumstances of nuclear damage
2. Forecast of compensation amount and compensation procedure
3. Mid-term Plans concerning the Business and the Balance of Payments
4. Measures for rationalization of management
5. Measures to request cooperation of relevant parties
6. Evaluation of assets and income/expenditure conditions
7. Measures to clarify management responsibility
8. Contents and amounts of financial assistance, etc.

[Reference]

The Current Status of Kashiwazaki-Kariwa

Nuclear Power Station and Future Initiatives

◆ We promote the following measures to secure further safety after the Tohoku-Chihou-Taiheiyo-Oki Earthquake.

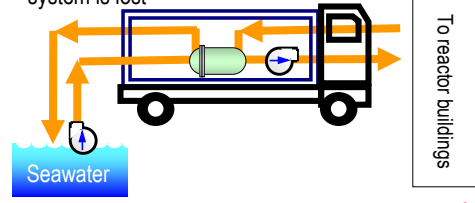
**I. Installation of flooding embankment [banks]**

- Install flooding embankment (banks) to prevent Tsunami from invading the site and to protect light oil tanks, buildings and other facilities in the power station



**III. Further enhancement of heat removal and cooling function**

- (5) Installation of alternative submerged pumps and seawater heat exchanging system
- Install alternative submerged pumps and other equipments to continue to operate residual heat removal system even if cooling function of sea water system is lost

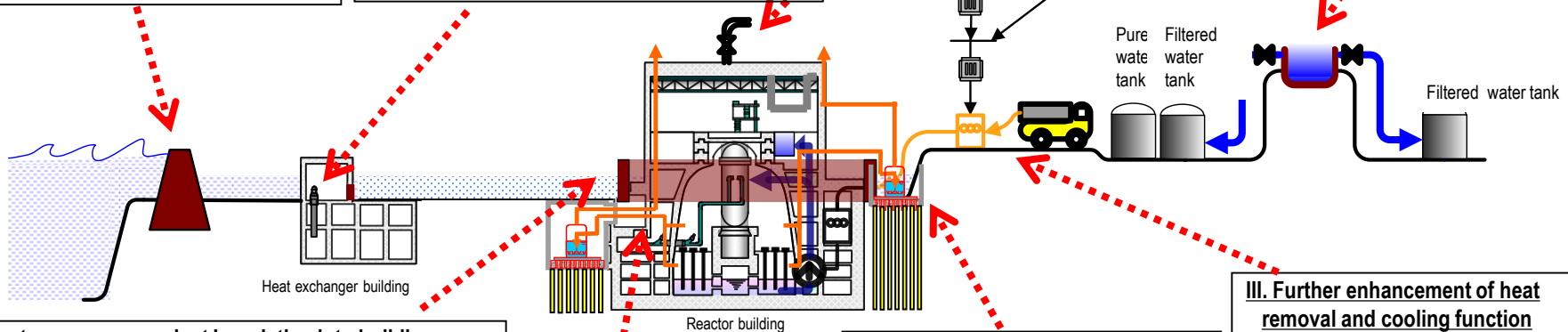


**III. Further enhancement of heat removal and cooling function**

- (8) Installation of top venting on reactor buildings
- Install top venting system to prevent hydrogen from piling up in a reactor buildings

**III. Further enhancement of heat removal and cooling function**

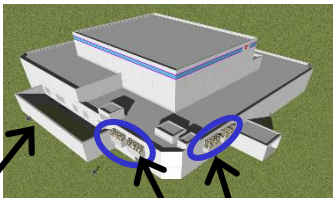
- (1) Installation of water source
- Install a freshwater reservoir in the power station to secure stable supply of coolant water for reactors and spent fuel pools



**II. Countermeasures against inundation into buildings**

- (1) Installation of tide embankments (flood barrier panel included)
- Install tide embankments around reactor buildings containing critical equipments in order to prevent Tsunami from damaging power facilities and emergency diesel generators and to secure safety of the power plant

(Image of tide embankment and flood barrier panel)



Tide embankment

Flood barrier panel

**II. Countermeasures against inundation into buildings**

- (2) Installation of water tight doors
- Install water tight doors at reactor buildings and turbine buildings to protect equipments from water

**III. Further enhancement of heat removal and cooling function**

- (12) Installation of warehouses for emergency on high ground
- Install a warehouse for equipments and materials for emergency in case of Tsunami

**III. Further enhancement of heat removal and cooling function**

- (7) Installation of filtered vent
- Control of radioactive pollution emitted upon containment vessel venting
- Installation of underground filtered vent for backfitting

**III. Further enhancement of heat removal and cooling function**

- (11) Additional environment monitoring equipments and monitoring cars
- Prepare additional monitoring cars to continuously measure radiation dose at the site

**III. Further enhancement of heat removal and cooling function**

- (3) Additional installation of air-cooling gas turbine power generation cars
- Install large capacity gas turbine power generation cars to supply electricity to residual heat removal system in case of outage of all AC power
- (4) Installation of high voltage power distribution board for emergency and permanent cables for reactor buildings
- Install high voltage power distribution board for emergency and permanent cables for reactor buildings to secure power supply in case of station black out (losing all AC power), and to secure stable supply of power to residual heat removal system





Item	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
I. Installation of flooding embankment [banks]	Completed				Completed		
II. Countermeasures against inundation into buildings							
(1) Installation of tide embankments (flood barrier panel included)	Completed	Completed	Completed	Completed	All closed under 15 meters above sea level		
(2) Installation of water tight doors on reactor buildings, etc.	Completed	Under consideration	Under consideration	Under consideration	Completed	Completed	Completed
(3) Countermeasures against inundation into heat exchanger buildings	Completed	Completed	Completed	Completed	Completed	—	
(4) Installation of tide barriers for switching stations <sup>*1</sup>	Completed						
(5) Reliability improvement of inundation countermeasures (countermeasures against flooding inside buildings)	Under construction	Under consideration	Under consideration	Under consideration	Under construction	Under construction	Under construction
III. Further enhancement of heat removal and cooling function							
(1) Installation of water source	Completed						
(2) Installation of storage water barrier	Completed	Under consideration	Under consideration	Under consideration	Completed	Completed	Completed
(3) Additional installation of air-cooling gas turbine power generation cars	Completed						
(4)-1 Installation of high voltage power distribution board for emergency	Completed						
(4)-2 Installation of permanent cables for reactor buildings	Completed	Completed	Completed	Completed	Completed	Completed	Completed
(5) Installation of alternative submerged pumps and seawater heat exchanging system	Completed	Completed	Completed	Completed	Completed	Completed	Completed
(6) Installation of alternative high pressure water injection system <sup>*1</sup>	Under construction	Under consideration	Under consideration	Under consideration	Under construction	Under construction	Under construction
(7) Installation of aboveground filter vent	Under construction	Under consideration	Under consideration	Under consideration	Under construction	Termination of performance test <sup>*2</sup>	Termination of performance test <sup>*2</sup>
(8) Installation of top venting on reactor buildings	Completed	Completed	Completed	Completed	Completed	Completed	Completed
(9) Installation of hydrogen treatment system in reactor buildings	Completed	Under consideration	Under consideration	Under consideration	Completed	Completed	Completed
(10) Installation of facilities to fill water up to the top of containment vessels	Completed	Under consideration	Under consideration	Under consideration	Under construction	Completed	Completed
(11) Additional environment monitoring equipments and monitoring cars	Completed						
(12) Installation of warehouses for emergency on high ground <sup>*1</sup>	Completed						
(13) Improvement of earthquake resistance of pure water tanks on the Ominato side	—				Completed		
(14) Preparation of concrete pump cars, etc.	Completed						
(15) Reinforcement of access roads	Completed	—	—	—	—	—	—
(16) Environmental improvement of the seismic isolated building	Completed						
(17) Reinforcement of the bases of transmission towers <sup>*1</sup> and earthquake resistance of the switchboards <sup>*1</sup>	Under construction						
(18) Installation of tsunami monitoring cameras	Under construction				Completed		

\*1 TEPCO's voluntary safety measures

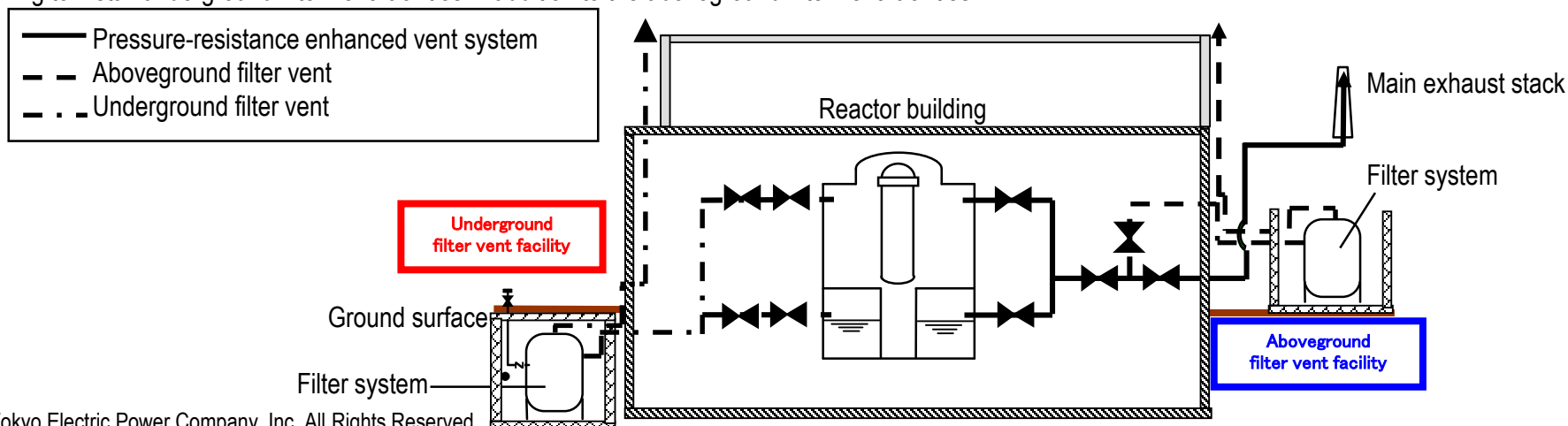
\*2 Peripheral works are ongoing.

: Under consideration
  : Under construction
  : Completed

- On September 27, 2013, TEPCO submitted to the Nuclear Regulation Authority (NRA) the application for permission for changes in reactor installation, approval for construction plans, and approval for changes in the technical specification for nuclear reactor facility, to receive the compliance examination under the New Regulatory Requirements\* for the Kashiwazaki-Kariwa Nuclear Power Station Units 6 and 7.  
\*New Regulatory Requirements for Commercial Power Reactors (enforced on July 8, 2013)
- On September 26, 2013, TEPCO obtained the approval of the application from Niigata Prefecture for the regulatory standard compliance examination before application to NRA, in condition to write it clearly that TEPCO submit an application for correction after the discussion with the Niigata Prefecture based on the Safety Agreement and that the filter vent is consistent with the local evacuation plan and not able to be utilized without the understanding based on the Safety Agreement.
- On November 21, 2013, NRA started the compliance examination of Kashiwazaki-Kariwa Nuclear Power Station. As of October 28, 2014, besides 15 Examination Meetings, 79 and 18 hearings regarding plant examinations and earthquake/tsunami countermeasures were held respectively.
- TEPCO is planning to install underground filter vent facilities in addition to the above-ground filter vent facilities. On December 24, 2013, TEPCO submitted a revised version of the "general outline of the plan regarding filter vent facilities for Kashiwazaki-Kariwa Nuclear Power Station Unit 6 and 7" to Niigata Prefecture and submitted documents seeking advance agreement to Kashiwazaki City and Kariwa Village concerning the underground filter vent facilities. After that, TEPCO received the advance agreement from Kariwa Village on February 3, 2014.
- TEPCO will comply with the Safety Agreement and will continue future discussion with Niigata Prefecture and the local governments and will make every effort to improve our delivery of easy-to-understand information.

< Reference : Image of the underground filter vent facilities >

Planning to install underground filter vent facilities in addition to the aboveground filter vent facilities





- In response to requests at the public hearing held by the Nuclear and Industrial Safety Agency of the Ministry of Economy, Trade and Industry (at the time) in August 2012, TEPCO started a boring investigation in September 2012 and announced evaluation results on April 18, 2013. Based on this evaluation results, it has been determined that all the faults found under the power station site\* have been inactive after the deposition of the lower Yasuda Layer (approx. 200,000 years ago).
    - ✕The New Regulatory Requirements come into effect on July 8, 2013 defines faults, etc. with the possibility of becoming active in the future as those of which activities later than the Late Pleistocene (later than 120-130,000 years ago) cannot be denied. Based on this, further investigation of activities for the Middle Pleistocene (later than 400,000 years ago) has been conducted, in case of necessity such as lack of strata or layer of Late Pleistocene.
  - On January 24, 2014, the Review Meeting on Conformity to the New Regulatory Requirements for nuclear power plants was held by Nuclear Regulation Authority (NRA). NRA asked TEPCO for additional investigations on faults beneath the site. After NRA had conducted an on-site survey, TEPCO started additional investigations on February 28, 2014.
  - On October 3, TEPCO illustrated at the Review Meeting that no data was found which was inconsistent with the results gained by past investigations, by showing the results of a part of the additional investigations, i.e. the “vertical shaft survey on Ominato side within the site” and the “boring survey for the confirmation of the continuity of  $\alpha$  and  $\beta$  faults within the site”. On October 30 and 31, NRA conducted an on-site survey.
  - TEPCO is committed to analyzing and evaluating the collected data and will give reports and explanations to NRA of such evaluations.
- \* A total of 23 faults such as  $\alpha$ ,  $\beta$  faults, F, V, L type faults and (1), (2) faults have been found under Kashiwazaki-Kariwa Nuclear Power Station.

<Reference: Distribution of faults in the site>

