# Outline of the 'Revised Comprehensive Special Business Plan (The Third Plan)'

## Tokyo Electric Power Company Holdings, Inc.

\*This document is an outline of the Revised Comprehensive Special Business Plan, summarized under the responsibility of Tokyo Electric Power Company Holdings, Inc..

This presentation is translated under the responsibility of Tokyo Electric Power Company Holdings, Inc. solely for reference purposes. Should there be any discrepancies between the English translation and the Japanese original, The latter shall prevail.

### 1. Framework for the 'Revised Comprehensive Business Plan'

- Since the creation of the New Comprehensive Special Business Plan (NCSBP), TEPCO Group's business environment has changed drastically. TEPCO Group must make efforts in 'non-consecutive management reform', improve its profitability and increase its enterprise value in order to fulfill its responsibilities for the Fukushima Nuclear Accident.
- Based on the results of the monitoring of TEPCO Group's efforts, the Nuclear Damage Compensation and Decommissioning Facilitation Corporation (NDF) will reconsider the government's involvement in the management of TEPCO Group at around the end of fiscal year 2019.

## Necessary funds related to the Fukushima Nuclear Accident (borne by TEPCO Group)

Decommissioning: 8 trillion yen, Compensation: 4 trillion yen

→ secure 500 billion yen per year

Decontamination: 4 trillion yen → Sell NDF's share in TEPCO HD

Improve profitability and increase enterprise value

#### **TEPCO Group's efforts (non-consecutive management reform)**

- Further efforts to 'double productivity' in view of global benchmarks
- Restart of Kashiwazaki-Kariwa Nuclear Power Station through 'Local community-centered, safety first' principle
- · Restructuring and integration through establishing consortiums
- Establishment of a new corporate culture to implement these reforms

#### **Cooperation of stakeholders**

- Government ⇒ Arrangements for decommissioning cost reserve
- Financial institutions ⇒ Support such as maintaining credit
- Shareholders ⇒ Understanding of the non-dividend policy

## Involvement of the government and NDF

- Fukushima Business: Strengthen government's involvement
- Economic Business: Hasten autonomy

monitor

- Reconsider further involvement at around the end of fiscal year 2019
- Early and steady recovery of public capital shall be broadly discussed, including the handling of the TEPCO Group share in consortiums

#### For the establishment of consortiums

- Proceed with the process of broad discussions with potential partners. Taking this into consideration, details of method should be decided around this fall
- Maintain flexibility in business management and investment ratio

## (Reference) Summary of the necessary funds

	1) Decommissioning	Compensation for the affected	3) Decontamination/ Interim storage	Total		
Total Amount	<b>8 trillion yen</b> (2 trillion yen)	<b>8 trillion yen</b> (5.4 trillion yen)	<b>6 trillion yen</b> (3.6 trillion yen)	Approx. 22 trillion yen (11 trillion yen)		
Borne by		Amount		Total		
TEPCO	8 trillion yen	4 trillion yen	4 trillion yen			
HD	Decommissioning cost reserve	General contribution/ Special contribution	Profit on sales of NDF's share of TEPCO HD	Approx. 16 trillion yen		
	Approx. 500 bi	llion yen per year	Share of TEPCO FID			
Major power companies	-	- 4 trillion yen		4 trillion yen		
PPSs	-	0.24 trillion yen	-	0.24 trillion yen		
Government			2 trillion yen	2 trillion yen		

<sup>\*</sup>Figures in brackets are those estimated in the New Comprehensive Special Business Plan

## 2. Fukushima Business (Compensation/Revitalization)

• Fulfilling responsibility for the Fukushima Nuclear Accident is the top priority of TEPCO Group. TEPCO Group will compensate those who were affected to the last person, and conduct activities in a manner consistent with the stage of revitalization.

#### [Efforts towards compensation and revitalization]

#### Compensation - Implementation of the 'Three Pledges' -

- 1) Provide compensation to every last person
  - Stand by those who were affected and complete the compensation
- 2) Prompt and highly-targeted compensation
  - Steady implementation of compensation for agriculture and forestry principles of compensation for reputational damage to be determined by the end of 2017 and applied from 2018
  - · Careful and proper compensation for continuous commercial and industrial damage
  - · Acceleration in the discussion on public damages
- 3) Respect for the mediation proposals from the Nuclear Damage Claim Dispute Resolution Center
  - · Sincerely take into consideration the ideas in the Dispute Reconciliation Committee's interim guidelines

#### Revitalization - Act jointly with the government according to the stage of the revitalization -

- 1) Efforts to restore businesses and lifestyles and promote self-reliance
  - · Human resource and financial contributions to the 'Fukushima Sousou Revitalization Public-private Team'
  - Dispelling of reputational damage in the revitalization of agriculture, forestry and fisheries; activities to expand sales routes
- 2) Cooperation to realize future vision for evacuation order areas
  - · Participation and cooperation to materialize the concept of 'Fukushima innovation coast'
  - · Construction of IGCC and cooperation for the 'Fukushima New Energy Society Initiative'
- 3) Efforts to support people's return home after evacuation orders are lifted
  - Cleaning, radiation monitoring and cooperation in safety patrols
  - · Human resource and technical cooperation in decontamination and construction of interim storage facilities
- 4) Efforts for revitalization of the 'Hard to return' areas
  - Human resource cooperation for developing specified revitalization bases, including decontamination

## 2. Fukushima Business (Decommissioning)

- Steadily implement contaminated water treatment and removal of spent fuel, and strengthen project management functions in order to further progress in difficult tasks such as the removal of fuel debris.
- Communicate sincerely with local communities and society regarding these efforts in order to gain understanding.

	Issues to be addressed							
Steady risk reduction	Contaminated water treatment and removal of spent fuel							
Strengthening project management function	<ul> <li>Strengthening project management function to optimize risks, resources and time</li> <li>Securement of safety through improvements in technical ability, sincere communication and reform of company culture</li> </ul>							
Establishment of decommissioning promotion scheme	<ul> <li>Promoting cooperative business with Japan Atomic Power Co., Inc. (JAPC)</li> <li>Research and development by industry, government and academia together, and application of domestic and overseas knowledge</li> </ul>							
Promotion of decommissioning based on Decommissioning Fund system	<ul> <li>Appropriate administration of funds and implementation framework for decommissioning</li> <li>Steadfast business management based on Decommissioning Fund system</li> </ul>							

## 3. Economic Business (Fuel/Thermal power business)

In order to realize the targets of 'Internationally competitive energy supply' and 'Contribution to Fukushima through increasing enterprise value', TEPCO FP will promote comprehensive alliances, conduct business together with JERA, and make efforts to increase the value of thermal power station operations.

#### [Business environment]

Domestic	Overseas	Increase in competitivene
<ul> <li>Drop in electricity demand</li> <li>Expansion of RE</li> <li>Change in market environment</li> <li>⇒ Expansion of profit opport</li> </ul>	<ul> <li>Promotion of renewable energy</li> <li>⇒ Increase in RE/Gas-fired Power stations</li> </ul>	Structuring of competitive assets  Building professional human with a clear locus of response.

#### ess and enterprise value

Optimization of holding assets

n resources + organization ponsibility and authority

#### [Efforts]

			FY 2017	FY 2018	FY 2019		
	Promotion of comp	orehensive alliances	▼ JV contract		▼ Full integration		
	Joint business	Fuel price reductions	Procurement portfolio evaluation method	То	Top level price advantage in Asia ▼		
Sho	with JERA	Fuel amount reductions	Realization of efficient thermal operations	Power portfolio evaluation method Es	tablishment of power portfolio		
ort-term	Increasing value	Maintenance cost reductions	Reforms in operation/maintenance and procurement	Globa	al top level (reduction by 30%) ▼		
_	of thermal power station operations	Establishment of a new business model	Overseas development via digitalizat of generation infrastructure	ion	Power station operation digitalization established		
	Sales of power and gas		Third-party sales Market creation/expansion in trading (from 20				
Mid	I-long term		Advance into new business areas cre	ated by fusion of energy usag	e and cutting-edge technology		

## 3. Economic Business (Transmission and Distribution business)

- Proceed with the 'non-consecutive management reform' and allocate the additional profits to decommissioning preferentially and steadily.
- Create new transmission and distribution network value by establishing consortiums and expand business to new areas such as overseas business.

#### (Business environment)

Domestic	Overseas
<ul> <li>Drop in electricity demand and network revenue</li> <li>Aging facilities, increase in costs</li> </ul>	<ul><li>Expansion of renewable energy</li><li>Improvements in balancing</li></ul>
⇒ business as before; decrease in investment	



- Increase competitiveness by restructuring and integration through establishing consortiums
- Improve financial status and technological capacity by realizing efficient business operations at the world's highest level



Raise decommissioning costs and expand overseas

#### [Efforts]

	Short-term	Mid-long term
Enhancement of T&D business foundations	Top level network cost in Japan in fiscal year 2018 (reduction of over 50 billion yen compared to FY 2016)  Cutting-edge ICT technology; expansion of 'Kaizen'  Multi-skilled personnel; rationalization of organization	Global top level network cost in fiscal year 2025 (reduction of about 150 billion yen compared to FY 2016)  Maintain long-term facility reliability (asset management) Establish framework for enhancement of business foundations
Creation of new network value	Realize strong and flexible T&D network  Intensify regional integration, enhance renewable energy connection and establish network foundations  Early establishment of a platform for sharing issues with other utilities	Creating value in the network beyond regional boundaries  •Integrated operation → Integrated planning/investment  •Consortium establishment (early 2020s)
Expansion of business	Acquisition of new revenue sources  • Development of platform business and overseas business • Alliances with other utilities	Further revenue expansion  Ownership and operation of overseas assets Investment in innovative distribution grid (digitalization)



Raise 120 billion yen/year on average through rationalization and allocate this to decommissioning preferentially and steadily.

## 3. Economic Business (Retail business)

• In light of the decline in electricity demand and increasing competition, reconstruct the revenue structure as an effect-providing business and transform into a comprehensive energy service entity which provides new value.

#### (Business environment)

#### **Market trends**

Progress in energy saving; transfer of production sites to overseas

- → Decrease in domestic energy demand
  - Intensified competition

Effect-providing business

'Competition' ⇒ 'Joint-creation'

- Business customers:
  - Energy services to realize energy savings and cost savings
- Individual customers:
   Services that bring comfort and sense of security
- Expansion of business domains and services through alliances with companies in different industries
- Enabling of comfortable and secure lifestyle and smart communities together with solar/storage battery-related companies

#### [Efforts]

# Accomplish sales of 450 billion yen via gas sales, new services and nationwide electricity supply services in three years

- 1) Expansion in gas sales
- Develop platform for gas business in FY 2017 and acquire one million customers by FY 2019

**Short-term** 

- Alliances with major LP gas companies; construction of own calorific value adjustment facility (second half of FY 2018)
- 2) Service development and expansion with a focus on energy saving
- Business customers: Nationwide expansion of energy saving consultancy and energy service business (ESP)
- Individual customers: Establishment of residential ESCO business
- 3) Nationwide business expansion
- Establishment of sales networks with companies in different industries
- 4) Reforms in electricity procurement
- Realize competitive and stable electricity procurement through negotiated transactions and Japan Electric Power Exchange,.

## Further expansion of business domains,

**Mid-long term** 

- business areas and services1) Expansion of domains and services through
- further alliances

  2) Creation of services through our strengths
- 2) Creation of services through our strengths such as energy saving technology and ICT
- Business customers:
- development of a comprehensive energy management model including electricity and heating
- Individual customers:
- enabling of a comfortable and secure lifestyle through optimized energy benefits
- 3) Be a company that contributes to regional development
- Tie-ups with companies in Fukushima



## 3. Economic Business (Nuclear business)

- Key principle for Nuclear business is 'Safety First'
- Make progress under the principles of 'Promotion of nuclear safety reform', 'Local community-centered' and 'Improvement in technical ability', regain the trust of society and realize the restart of Kashiwazaki-Kariwa nuclear power station.

#### [Improvements in safety and recovery of society's trust]

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Promotion of nuclear	)
safety refor	
Local	
Local	

- · Steady implementation of the 'Nuclear Safety Reform Plan'
- Establishment of a management model that realizes 'safe and efficient operations' throughout the whole organization
- Enhancement of management skills education for managers

#### Local communitycentered

- Fully cooperate in the three inspections conducted by Niigata prefecture
- Explain with care the situation regarding the safety of the power station to the local community, mainly via Niigata Headquarters
- Propose at an early stage a 'Local community-centered action plan' including enhancements in support for regional disaster prevention

# Improvements in technical ability

- Reform the organizational structure, such as via the establishment of a 'Regulatory compliance improvement team'
- Aggressive adoption of practices employed at advanced electric power companies and acceptance of overseas evaluations
- Efficient organizational operations and technology enhancements via the establishment of an Engineering Center

#### [Efforts to increase enterprise value]

# Improvements in productivity

- Thoroughly inspect investments and costs, and concentrate resources on safety improvement
- Reduce procurement costs by 30% within three years of the restart

# Enhancing cooperation with other companies

- Enhance cooperation with domestic companies in order to solve common nuclear issues
- Cooperate with other companies to realize a 'light water reactor' with an advanced level of safety and low costs
   ⇒Invite partners and establish the basic framework for cooperation by around FY 2020, in line with the energy policy
   and understanding of the local community
- ⇒Handling of Higashidori nuclear power station shall be discussed within this framework
- · Framework to be expanded to overseas generation business and decommissioning business in the future

## 3. Economic Business (Renewable and other businesses)

• Expand competitive renewable energy business with TEPCO Group's technology and development capabilities, in view of the importance of, and growth in demand for, renewable energy in a low carbon society.

#### [Expansion of renewable energy business]

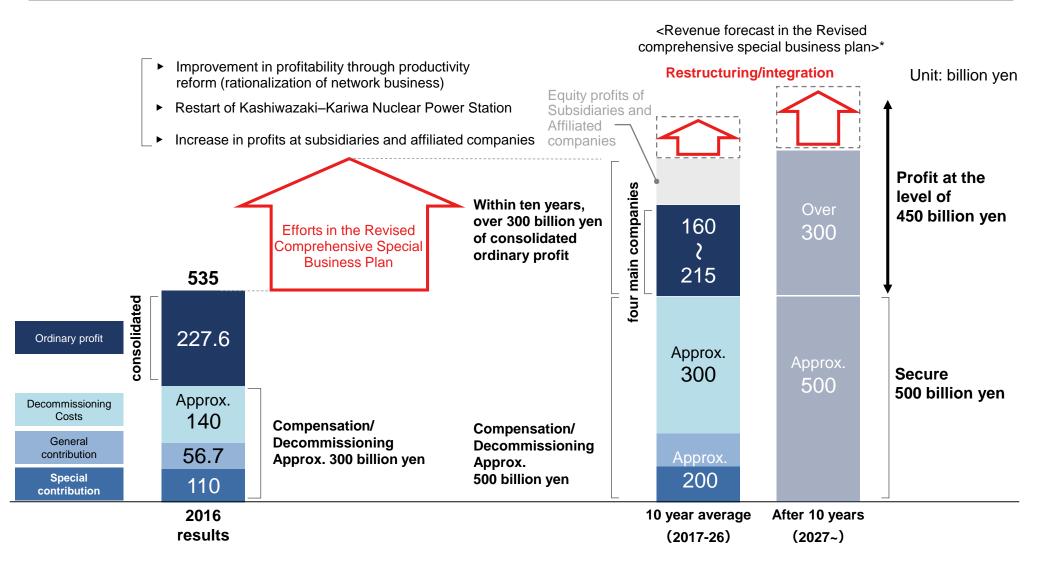
Short-term efforts	Mid-long term efforts
<ul> <li>Increase revenue by taking advantage of the consistent business model for hydro and wind power, from planning and development to operation and maintenance</li> <li>Increase in connectable capacity through steady reinforcement of the grid system and controlling of voltage and flow for each system</li> <li>Electricity trading business using flexibility and storage ability of pumped–storage power plants</li> <li>Overseas business expansion using TEPCO Group's technology</li> </ul>	<ul> <li>Creation of enterprise value by introducing innovative business models</li> <li>Creation of new environmental value such as G&amp;I*</li> <li>Development of new social infrastructure businesses making use of new technologies and facilities owned</li> <li>Establishment of a framework to accelerate overseas business</li> </ul>

\*Green & Innovation (Energy business related to distributed generation)

#### (Utilization and redistribution of management resources)

Redistribution to strategic investments	Human resources strategy
<ul> <li>Reduce existing investments and redistribute them to Fukushima Business and strategic investments to increase enterprise value</li> <li>1.89 trillion yen for redistribution (total for 2017-2026)</li> <li>0.9 trillion yen for decommissioning and nuclear safety; 0.19 trillion yen for reinforcement of the grid system</li> <li>0.8 trillion yen for strategic investments</li> </ul>	<ul> <li>Optimization of group management resources</li> <li>Increase human resource efficiency through improvement of productivity, and relocate suitable human resources to growing businesses</li> <li>Recruitment from inside and outside the company in order to create a new corporate culture</li> <li>Reform of the personnel system in order to accomplish the above</li> </ul>

## 4. Financial status and forecast (provisional)



<sup>\*</sup>Profits and costs differ in each scenario due to the difference in timing of the Kashiwazaki–Kariwa nuclear power station restart.

## 4. Financial status and forecast (assumptions)

Exchange rate: 115 yen/\$ (latest rate)

Oil price (CIF): 55~100\$/barrel

<Under the assumption that Kashiwazaki–Kariwa nuclear power station will restart operations from FY 2019>

KK	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Unit 7										$\longrightarrow$
Unit 6										<del></del>
Unit 1										$\longrightarrow$
Unit 5										$\longrightarrow$
Unit 3										$\longrightarrow$
Unit 4					Ir	cluding un	its 2-4 <b>-</b>			$\rightarrow$
Unit 2										$\longrightarrow$

#### <Under the assumption that Kashiwazaki–Kariwa nuclear power station will restart operations from FY 2020>

KK	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Unit 7										$\longrightarrow$
Unit 6										$\longrightarrow$
Unit 1										$\longrightarrow$
Unit 5										$\rightarrow$
Unit 3								۲		$\rightarrow$
Unit 4						In	cluding un	ts 2-4		$\rightarrow$
Unit 2										$\longrightarrow$

#### <Under the assumption that Kashiwazaki–Kariwa nuclear power station will restart operations from FY 2021>

KK	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Unit 7										$\longrightarrow$
Unit 6										$\longrightarrow$
Unit 1										$\rightarrow$
Unit 5										$\rightarrow$
Unit 3										$\longrightarrow$
Unit 4							in	cluding un	its 3-4 <b>\{</b>	$\longrightarrow$
Unit 2										

## 5. Seeking cooperation from other stakeholders

Financial institutions	<ul> <li>Maintaining credit through refinancing</li> <li>Implementation of additional financing and approval of short-term credit line</li> <li>Financing for TEPCO HD and major subsidiaries</li> <li>Approval of restructuring and integration, such as asset transfer to JERA*</li> <li>New financing for financial requirements deriving from strategic management streamlining and growth strategies of the major subsidiaries*</li> </ul>
Shareholders	<ul> <li>Continued non-dividend policy</li> <li>Future dividend policy will be discussed with consideration of the financial situation, and TEPCO Group's historical payments and future outlook regarding compensation and decommissioning</li> <li>Conversion of preferred stocks owned by NDF to common shares, and accompanying dilution</li> </ul>

<sup>\*</sup>Under conditions that repayment will not be affected