

FINANCIAL STATEMENTS

J-POWER Group 2018





Consolidated Balance Sheet

As of March 31

		Millions of yen
ASSETS	2017	2018
Noncurrent assets	¥2,271,046	¥2,320,012
Electric utility plant and equipment	958,754 ^{1) 2) 6)}	951,149 ^{1) 2) 6}
Hydroelectric power production facilities	346,037	346,719
Thermal power production facilities	313,198	305,191
Internal combustion engine power production facilities	3,301	3,029
Renewable power production facilities	46,170	50,784
Transmission facilities	157,790	153,180
Transformation facilities	29,598	29,718
Communication facilities	8,186	8,375
General facilities	54,470	54,148
Overseas business facilities	332,010 ^{2) 6)}	341,418 ^{2) 6)}
Other noncurrent assets	92,501 ^{1) 2)}	93,404 ^{1) 2)}
Construction in progress	476,171 ⁶⁾	525,740 ⁶⁾
Construction and retirement in progress	476,171	525,740
Nuclear fuel	73,682	73,800
Nuclear fuel in processing	73,682	73,800
Investments and other assets	337,926	334,500
Long-term investments	253,660 ^{3) 6)}	256,715 ^{3) 6)}
Net defined benefit asset	2	_
Deferred tax assets	40,514	42,501
Other	43,794 6)	35,283 ⁶⁾
Allowance for doubtful accounts	(45)	_

335,239	
117,240 6)	129,675 ⁶⁾
78,805 ⁶⁾	91,432 ⁶⁾
51,344	9,045
47,172 4)	52,368 ⁴⁾
4,564	5,411
36,129 6)	39,322 ⁶⁾
(18)	(46)
	117,240 ⁶⁾ 78,805 ⁶⁾ 51,344 47,172 ⁴⁾ 4,564 36,129 ⁶⁾

Total assets	¥2,606,285	¥2,647,221

		Millions of yen
LIABILITIES	2017	2018
Noncurrent liabilities	¥1,497,888	¥1,561,922
Bonds payable	494,991	554,991
Long-term loans payable	891,200 6)	875,043
Lease obligations	353	368
Other provision	120 5)	152
Net defined benefit liability	58,079	55,176
Asset retirement obligations	11,971	28,484
Deferred tax liabilities	23,387	22,437
Other	17,783	25,266
Current liabilities	344,377	249,174
Current portion of noncurrent liabilities	208,760 6)	114,307
Short-term loans payable	24,957	16,803
Notes and accounts payable-trade	24,616	25,539
Accrued taxes	19,843	26,303
Other provision	267 5)	292
Asset retirement obligations	592	341
Deferred tax liabilities	5	73
Other	65,333	65,512
Fotal liabilities	1,842,266	1,811,096

NET ASSETS

Shareholders' equity	689,542	745,176
Capital stock	180,502	180,502
Capital surplus	119,927	119,927
Retained earnings	389,117	444,753
Treasury stock	(5)	(6
Accumulated other comprehensive income	34,276	42,114
Valuation difference on available-for-sale securities	15,594	16,822
Deferred gains or losses on hedges	(2,183)	(6,580
Foreign currency translation adjustment	21,295	30,960
Remeasurements of defined benefit plans	(430)	912
Non-controlling interests	40,200	48,833
Total net assets	764,019	836,124
Total liabilities and net assets	¥2,606,285	¥2,647,221

Year ended March 31

		Millions of yen
	2017	2018
Operating revenue	¥744,402	¥856,252
Electric utility operating revenue	538,558	631,923
Overseas business operating revenue	149,888	163,084
Other business operating revenue	55,955	61,244
Operating expenses	662,675 ^(1) 2)	751,916 ^{1) 2)}
Electric utility operating expenses	487,766	566,143
Overseas business operating expenses	119,535	131,251
Other business operating expenses	55,374	54,521
Operating income	81,726	104,336
Non-operating income	20,526	29,113
Dividend income	1,689	1,577
Interest income	1,024	1,287
Share of profit of entities accounted for using equity method	13,258	9,721
Foreign exchange gains	1,770	11,179
Other	2,783	5,347
Non-operating expenses	35,103	30,974
Interest expenses	29,798	28,387
Other	5,304 3)	2,586
Total ordinary revenue	764,929	885,366
Total ordinary expenses	697,779	782,890
Ordinary income	67,150	102,476
Extraordinary losses	_	3,389
Impairment losses	_	3,389 ³⁾
Profit before income taxes	67,150	99,086
ncome taxes-current	18,634	20,124
ncome taxes-deferred	2,847	(3,700)
Total income taxes	21,482	16,423
Profit	45,667	82,662
Profit attributable to non-controlling interests	4,238	14,213
Profit attributable to owners of parent	¥41,429	¥68,448

Consolidated Statement of Comprehensive Income

Year ended March 31

		Millions of yen
	2017	2018
Profit	¥45,667	¥82,662
Other comprehensive income		
Valuation difference on available-for-sale securities	3,071	1,229
Deferred gains or losses on hedges	6,104	(4,134)
Foreign currency translation adjustment	(3,960)	10,385
Remeasurements of defined benefit plans, net of tax	12,379	1,341
Share of other comprehensive income of entities accounted for using equity method	(1,257)	812
Total other comprehensive income	16,336 1)	9,634
Comprehensive income	62,004	92,297
(Comprehensive income attributable to abstract)		
Comprehensive income attributable to owners of parent	53,069	76,286
Comprehensive income attributable to non-controlling interests	¥8,934	¥16,010

For the years ended March 31

					Millions of yen
			Shareholders' equity		
2017	Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance at the beginning of current period	¥180,502	¥109,902	¥360,418	¥(4)	¥650,817
Cumulative effects of changes in accounting policies			83		83
Restated balance	180,502	109,902	360,502	(4)	650,901
Changes of items during period					
Dividends of surplus			(12,813)		(12,813)
Profit attributable to owners of parent			41,429		41,429
Purchase of treasury shares				(0)	(0)
Change in ownership interest of parent due to					
transactions with non-controlling interests		10,025			10,025
Net changes of items other than shareholders' equity					
Total changes of items during period		10,025	28,615	(0)	38,640
Balance at the end of current period	¥180,502	¥119,927	¥389,117	¥(5)	¥689,542

						N	1illions of yen
		Accumulat	ed other comp	rehensive income			
	Valuation difference on available- for-sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Remeasurements of defined benefit plans	Total accumulated other comprehensive income	Non- controlling interests	Total net assets
Balance at the beginning of current period	¥12,516	¥(14,395)	¥30,464	¥(12,809)	¥15,775	¥ 8,839	¥675,433
Cumulative effects of changes in accounting policies							83
Restated balance	12,516	(14,395)	30,464	(12,809)	15,775	8,839	675,517
Changes of items during period							
Dividends of surplus							(12,813)
Profit attributable to owners of parent							41,429
Purchase of treasury shares							(0)
Change in ownership interest of parent due to transactions with non-controlling interests							10,025
Net changes of items other than shareholders' equity	3,077	12,212	(9,168)	12,379	18,500	31,360	49,861
Total changes of items during period	3,077	12,212	(9,168)	12,379	18,500	31,360	88,502
Balance at the end of current period	¥15,594	¥(2,183)	¥21,295	¥(430)	¥34,276	¥40,200	¥764,019

				Millions of yen
	8	Shareholders' equity		
Capital stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
¥180,502	¥119,927	¥389,117	¥(5)	¥689,542
180,502	119,927	389,117	(5)	689,542
		(12,813)		(12,813)
		68,448		68,448
			(1)	(1)
	—			_
_		55,635	(1)	55,633
¥180,502	¥119,927	¥444,753	¥(6)	¥745,176
	¥180,502 180,502	Capital stock Capital surplus ¥180,502 ¥119,927 180,502 119,927	Capital stock Capital surplus earnings ¥180,502 ¥119,927 ¥389,117 180,502 119,927 389,117 (12,813) 68,448 — 55,635	Capital stock Capital surplus Retained earnings Treasury stock ¥180,502 ¥119,927 ¥389,117 ¥(5) 180,502 119,927 389,117 (5) (12,813) 68,448 (1) — — 55,635 (1)

						N	1illions of yen
		Accumulat	ed other comp	rehensive income			
	Valuation				Total		
	difference on available-	Deferred	Foreign	Democra were ente	accumulated other	Non-	
	for-sale	gains or losses on	currency translation	Remeasurements of defined	comprehensive	controlling	Total net
	securities	hedges	adjustment	benefit plans	income	interests	assets
Balance at the beginning of current period	¥15,594	¥(2,183)	¥21,295	¥(430)	¥34,276	¥40,200	¥764,019
Cumulative effects of changes in accounting policies					· · · · ·		_
Restated balance	15,594	(2,183)	21,295	(430)	34,276	40,200	764,019
Changes of items during period							
Dividends of surplus							(12,813)
Profit attributable to owners of parent							68,448
Purchase of treasury shares							(1)
Change in ownership interest of parent due to							
transactions with non-controlling interests							_
Net changes of items other than shareholders' equity	1,227	(4,397)	9,664	1,342	7,838	8,633	16,471
Total changes of items during period	1,227	(4,397)	9,664	1,342	7,838	8,633	72,105
Balance at the end of current period	¥16,822	¥(6,580)	¥30,960	¥912	¥42.114	¥48.833	¥836,124

Years ended March 31

		Millions of yen
	2017	2018
Cash flows from operating activities		
Profit before income taxes	¥67,150	¥99,086
Depreciation and amortization	75,660	82,298
Impairment loss	2,624	3,389
Loss on retirement of noncurrent assets	2,842	3,039
Increase (decrease) in net defined benefit liability	9,276	(1,046)
Interest and dividend income	(2,713)	(2,864)
Interest expenses	29,798	28,387
Decrease (increase) in notes and accounts receivable-trade	(13,433)	(10,801)
Decrease (increase) in inventories	(5,503)	(5,121)
Increase (decrease) in notes and accounts payable-trade	(6,477)	(2,143)
Share of (profit) loss of entities accounted for using equity method	(13,258)	(9,721)
Other, net	6,786	6,863
Subtotal	152,753	191,366
Interest and dividends income received	13,229	16,620
Interest expenses paid	(30,224)	(28,486)
Income taxes paid	(20,317)	(19,190)
Net cash provided by (used in) operating activities	115,440	160,310
Cash flows from investing activities		
Purchase of noncurrent assets	(108,149)	(98,816)
Payments of investment and loans receivable	(18,005)	(8,149)
Collection of investment and loans receivable	2,577	2,243
Other, net	(14,086)	(4,913)
Net cash provided by (used in) investing activities	(137,663)	(109,635)
Cash flows from financing activities		
Proceeds from issuance of bonds	79,702	99,633
Redemption of bonds	(90,000)	(160,100)
Proceeds from long-term loans payable	83,762	56,510
Repayment of long-term loans payable	(69,108)	(53,280)
Proceeds from short-term loans payable	87,663	67,708
Repayment of short-term loans payable	(90,194)	(75,813)
Proceeds from issuance of commercial papers	15,000	15,000
Redemption of commercial papers	(15,000)	(15,000)
Proceeds from sales of subsidiaries' shares	· · · /	
that do not result in changes in scope of consolidation	42,363	—
Cash dividends paid	(12,811)	(12,810)
Cash dividends paid to non-controlling interests	—	(7,342)
Other, net	(916)	(329)
Net cash provided by (used in) financing activities	30,461	(85,825)
Effect of exchange rate change on cash and cash equivalents	267	3,536
Net increase (decrease) in cash and cash equivalents	8,505	(31,614)
Cash and cash equivalents at beginning of the period	159,949	168,454
Cash and cash equivalents at end of the period	¥168,454 ¹⁾	¥136,840

For the years ended March 31, 2017 and 2018

Summary of Significant Accounting Policies

1. SCOPE OF CONSOLIDATION

Number of consolidated subsidiaries: 71

The accompanying consolidated financial statements include the accounts of Electric Power Development Co., Ltd. (the "Company") and its 71 subsidiaries controlled directly or indirectly by the Company.

In this fiscal year, and J-POWER Westmoreland Partners, LLC and another company, which were established in January 2017, Jackson Generation, LLC and another company, which were established in April 2017 became consolidated subsidiaries. J-Wind Co., Ltd., a consolidated subsidiary, merged Nikaho-Kogen Wind Power Co., Ltd., Japan Clean Energy Development Co., Ltd., and J-Wind OOMA Co., Ltd., all of which had been consolidated subsidiaries, in April 2017.

As EM MARITIME S.A. was liquidated in October 2017, it is no longer a consolidated subsidiary.

2. APPLICATION OF EQUITY METHOD

Number of companies accounted for by the equity method: 88 In this fiscal year, Tenaska Pennsylvania Partners. LLC and another company, which were acquired in January 2017, Hibiki Wind Energy Co., Ltd., which was established in April 2017, J-POWER USA Generation Capital, LLC and another company, which were established in August 2017, and Suzuyo Electric Power Co., Ltd., which was established in February 2018 are newly included in the scope of accounting by the equity method.

Affiliated companies that were not accounted for by the equity method (Nishikyushu Kyodo Kowan Co., Ltd. and others) are not material in terms of consolidated net income (proportional amount of equity) and loss and retained earnings (proportional amount of equity), and their overall impact is immaterial, so they have been excluded from the scope of equity method accounting.

Of the companies accounted for by the equity method, 80 companies exclusive of Kashima Power Co., Ltd., Yuzawa Geothermal Power Generation Corporation, Osaki CoolGen Corporation, Setouchi Power Corporation, Suzuyo Electric Power Co., Ltd., Tosa Power Inc., Yamaguchi-Ube Power Generation Co., Ltd. and Hibiki Wind Energy Co., Ltd. have reporting dates that differ from that of the Company. So financial statements as of their respective reporting dates are used.

3. REPORTING DATES OF CONSOLIDATED SUBSIDIARIES, ETC.

All of the consolidated subsidiaries, except for J-POWER AUSTRALIA PTY. LTD. and 32 other overseas subsidiaries, have the same reporting date as that of the Company. The fiscal yearend of each of J-POWER AUSTRALIA PTY. LTD. and 32 other overseas subsidiaries is the end of December. The financial statements of these subsidiaries as of the date are used for consolidation after necessary adjustments with regard to significant transactions incurred during the periods between their fiscal yearends and that of the Company.

4. ACCOUNTING POLICIES

(1) Valuation policies for assets

a. Long-term investments (available-for-sale securities) Available-for-sale securities with market value are stated at market value on the balance sheet date. Cost of sold securities is stated using the moving average method. Unrealized gain (loss) on available-for-sale securities is included in net assets. Available-for-sale securities without market value are stated at cost determined by the moving average method.

b. Money in trust for cash management purposes Stated at market value.

c. Derivatives

Stated at fair value, and hedge accounting is applied to those instruments which fulfill hedge conditions.

d. Inventories

Valuation standard: cost method (book values on the balance sheet are written down on the basis of decline in profitability). Valuation method: specialty goods are stated at cost determined by the identified cost method, and other inventories are stated at cost determined by the monthly average method.

(2) Depreciation and amortization of noncurrent assets a. Depreciation and amortization method (Tangible assets)

Mainly straight-line method has been applied.

(Intangible assets)

Straight-line method has been applied.

Software costs for internal use are amortized based on the internally available period (five years) using the straight-line method.

b. Estimated useful lives

The same as prescribed in the Corporation Tax Law of Japan has been applied.

(3) Allowance and reserve policies

a. Allowance for doubtful accounts

To provide for doubtful accounts of accounts receivable and others through consideration of their recoverability based on the historical experience with bad debt for general receivables and based on the individual recoverability for specific receivables from companies in financial difficulty, the estimated irrecoverable amounts are posted.

(4) Accounting for employee retirement benefits

a. Attribution of estimated retirement benefits In calculating retirement benefit obligations, estimated retirement benefits are attributed to each period to the end of current fiscal year by the benefit formula method.

b. Recognition of actuarial differences and past service cost Actuarial differences are primarily recognized under the decliningbalance method over two years from the fiscal year following the fiscal year in which they were incurred, and past service costs are mainly recognized under the straight-line method over two years from the year in which the expense was incurred.

(5) Accounting for revenue and cost

a. Revenue and cost for construction contracts

(Construction contracts for which the degree of completion can be confirmed at the end of fiscal year)

Based on the percentage of completion method (estimated degree of completion for construction is calculated by the cost-to-cost method).

(Other construction contracts)

Based on the completed contract method.

(6) Hedge accounting

a. Method of hedge accounting

Deferred hedge accounting is applied. For hedges of foreign exchange fluctuation risk, the allocation method is applied when the hedge satisfies the requirements. For interest rate swaps, the special method is applied when the swaps satisfy the requirements.

b. Hedging instruments and targets

Hedging instruments	Hedged items
Foreign exchange	Payments of principal and interest
forward contracts,	with respect to foreign-currency-
foreign currency	denominated bonds and loans, some
swaps	foreign-currency-denominated
	receivables and payables
Interest rate swaps,	Payments of principal and interest with
Interest rate collar	respect to bonds and loans
transactions	
Commodity-price-	Some transactions affected by
related swaps	fluctuations in commodity prices

c. Hedging policies

Based on the Company's internal regulations relating to derivative transactions, derivatives are executed for the purpose of avoiding the risks caused by fluctuating exchange rates, interest rates, and commodity purchase prices, and the Company's policy is not to perform speculative transactions.

d. Evaluation of hedge effectiveness

The Company evaluates hedge effectiveness on a quarterly basis or a per transaction basis by comparing cumulative changes in cash flow of hedging instruments with cumulative changes in hedged cash flow. Evaluation of the effectiveness of foreign exchange forward contracts and foreign currency swaps to which the allocation method is applied and interest rate swaps to which the special method is applied has been omitted.

(7) Cash and cash equivalents presented in the consolidated statements of cash flows

Cash and cash equivalents consist of cash on hand, bank deposits which can be withdrawn on demand, and short-term investments with a maturity of three months or less when purchased which can easily be converted into cash and are subject to little risk of change in value.

(8) Others

a. Accounting for consumption taxes Transactions subject to consumption taxes are recorded at

amounts exclusive of consumption taxes.

Accounting Standards Issued but Not Yet Effective

On March 30, 2018, the ASBJ issued "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29) and "Implementation Guidance on Accounting Standard for Revenue Recognition" (ASBJ Guidance No. 30).

(1) Overview

This is a comprehensive accounting standard for revenue recognition. Specifically, the accounting standard establishes the following five-step model that will apply to revenue from customers:

- 1. Identify the contract(s) with a customer
- 2. Identify the performance obligations in the contract
- 3. Determine the transaction price
- 4. Allocate the transaction price to the performance obligations in the contract

Changes in Presentation Methods

(Consolidated Statements of Income)

In the previous fiscal year, foreign exchange gains were included in "Other " in "Non-operating income", but it was presented separately from the current fiscal year since it was exceeded 10% of nonoperating income. To reflect this change in presentation, the consolidated financial statements for the previous fiscal year were reclassified. Recognize revenue when (or as) the entity satisfies a performance obligation

(2) Scheduled date of adoption

The Company expects to adopt the accounting standard and implementation guidance from the beginning of the fiscal year ending March 31, 2022.

(3) Impact of the adoption of accounting standard and implementation guidance

The Company is currently evaluating the effect of the adoption of this accounting standard and implementation guidance on its consolidated financial statements.

As a result, 4,554 million yen presented as "Other" in the Consolidated Statements of Income for the previous fiscal year was reclassified as 1,770 million yen presented as "Foreign exchange gains" and 2,783 million yen presented as "Other".

Changes in Accounting Estimates

(Changes in estimates of asset retirement obligation)

Asset retirement obligation was recorded as an obligation to restore the property to the state stipulated in the real estate lease agreement related to the consolidated subsidiary that operates the wind power generation business. The Company changed estimates of the recovery cost, through obtaining new information such as recent actual restoration costs.

The increase of 11,863 million yen due to this change was added to the balance of "Asset retirement obligations" before the estimate change. As a result, compared with the amounts that would have been recognized under the previous estimates, "Operating income", "Ordinary income", and "Profit before income taxes" for the current fiscal year decreased by 2,010 million yen, respectively.

Consolidated Balance Sheet

1) Construction grants, which were deducted from the cost of noncurrent assets (accumulated)

		Millions of yen
As of March 31	2017	2018
	¥127,538	¥126,839

2) Accumulated depreciation of tangible assets

		Millions of yen
As of March 31	2017	2018
	¥3,000,217	¥3,041,392

3) Long-term investments in non-consolidated subsidiaries and affiliated companies

Stocks	¥180,026	¥182,899
As of March 31	2017	2018
		Millions of yen

4) Inventories

		Millions of yen
As of March 31	2017	2018
Merchandise and finished goods	¥1,321	¥1,319
Work in process	847	1,433
Raw materials and supplies	45,004	49,615
Total	¥47,172	¥52,368

5) Provisions

As of March 31	2017	2018
	Provisions for directors' bonuses stated by subsidiaries are included in other provision	Provisions for directors' bonuses stated by subsidiaries are included in other provision

6) Pledged assets and secured liabilities

(1) Assets of the Company pledged for loans of other companies

		Millions of yen
As of March 31	2017	2018
Long-term investments	¥3,182	¥3,268

(2) Assets of the consolidated subsidiaries pledged for loans of other companies

		Millions of yen
As of March 31	2017	2018
Long-term investments	¥222	—

(3) Assets of consolidated subsidiaries pledged to financial institutions for debt

		Millions of yen
As of March 31	2017	2018
Overseas business facilities	¥311,615	¥320,067
Cash and deposits	59,000	38,107
Long-term investments	19,805	17,776
Electric utility plant and equipment	5,982	5,031
Other (Investments and other assets)	4,228	4,013
Notes and accounts receivable-trade	180	269
Other (Current assets)	212	215
Construction in progress	¥180	¥172

Liabilities related to pledged assets mentioned above

		Millions of yen
As of March 31	2017	2018
Long-term loans (including current portion)	¥302,397	¥286,140

7) Contingent liabilities

(1) Guarantees

		Millions of yen
As of March 31	2017	2018
Guarantees given to certain financial institutions for loans of companies below:		
PT. BHIMASENA POWER INDONESIA	¥31,165	¥29,512
Zajaczkowo Windfarm Sp. z o. o.	2,615	2,854
Yuzawa Geothermal Power Generation Corporation	482	895
SAHARA COOLING Ltd.	188	186
Guarantees given in connection with housing loans to employees	1,032	847
Total	¥35,483	¥34,296

(2) Guarantees given to certain banks for performance bonds under power purchase agreements of the company below:

		Millions of yen
As of March 31	2017	2018
PT. BHIMASENA POWER INDONESIA	¥2,670	¥2,528

(3) Guarantees given for payment obligations on wind power generator purchase agreements of the company below:

		Millions of yen
As of March 31	2017	2018
J-Wind Setana Co., Ltd.	¥7,804	¥8,243

(4) Guarantees given for joint liability for performance guarantee insurance agreements of the company below:

		Millions of yen
As of March 31	2017	2018
Biocoal Kumamoto-South Co., Ltd.	¥19	¥18

Consolidated Statement of Income

1) A breakdown of electric utility operating expenses

				Millions of yen
		2017		2018
Year ended March 31	Electric utility operating expenses	Selling, general and administrative expenses*	Electric utility operating expenses	Selling, general and administrative expenses*
Personnel expenses	¥44,079	¥30,355	¥33,032	¥19,643
Fuel cost	203,553	_	267,549	_
Repair expenses	65,849	1,336	61,346	1,143
Consignment cost	37,903	12,083	40,448	14,126
Taxes and duties	24,519	703	25,732	731
Depreciation and amortization cost	52,973	1,952	58,838	1,967
Research expenses	3,860	3,860	15,385	15,385
Other	55,026	7,055	63,809	7,954
Total	¥487,766	¥57,346	¥566,143	¥60,951

* Included in electric utility operating expenses

(Changes in Presentation Methods)

In the previous fiscal year, retirement benefit expenses were presented as "Retirement benefit expenses included above" under "Personnel expenses" but it is omitted from the current fiscal year due to diminished importance. In the previous fiscal year, "Research expenses" were included in "Other" but it is presented separately due to increased importance. To reflect these changes in presentation, the breakdown for the previous fiscal year is reclassified.

As a result, 58,886 million yen presented as electric utility operating expenses – other in the previous fiscal year is reclassified 3,860 million yen as "Research expenses" and 55,026 million yen as "Other", and 10,915 million yen presented as selling, general and administrative expenses – other is reclassified 3,860 million yen as "Research expenses" and 7,055 million yen as "Other", respectively.

2) Research and development costs included in operating expenses

		Millions of yen
Year ended March 31	2017	2018
	¥5,867	¥17,232

Research and development costs are presented in a total amount pursuant to the Accounting Standard for Research and Development Costs, etc. ("Opinion Concerning Establishment of

3) Impairment loss

For the year ended March 31, 2017

The Company and its subsidiaries group assets based on their management accounting categories under which continuous oversight of the balance of payments is maintained. (Electric utility plants and equipment are grouped by business department, and overseas business facilities and other noncurrent assets are grouped by control management department or site.)

Due to a deterioration in the business environment and other factors, the Company examined the potential for future collectability, Accounting Standard for Research and Development Costs, etc." issued by the Business Accounting Deliberation Council on March 13, 1998).

and consequently determined that it would be difficult to collect on certain investments relating to special asset groups. Therefore, the book value was written down to the recoverable amount. Moreover, idle assets for which no immediate use was foreseen and others were grouped individually, and written down to their recoverable amount. The corresponding impairment loss of 2,624 million yen was recognized under non-operating expenses – other.

The main components of impairment loss are as follows:

		Millions of yen
Use and location	Classification	Amount
Machinery in a coal mine (J-POWER AUSTRALIA PTY. LTD; Queensland state, Australia)	Machinery	¥2,607

(Calculation of the recoverable amount)

Machinery in a coal mine was recorded at the value in use due to retirement and the total amount of the book value was posted as an impairment loss. The recoverable amount of idle assets was measured according to their net selling value; assets slated for sale were recorded based on their expected selling value, while other assets were appraised at a value that reflects market prices.

For the year ended March 31, 2018

The Company and its subsidiaries group assets based on their management accounting categories under which continuous oversight of the balance of payments is maintained. (Electric utility plants and equipment are grouped by business department, and overseas business facilities and other noncurrent assets are grouped by control management department or site.)

Due to a deterioration in the business environment and other factors, the Company examined the potential for future collectability,

The main components of impairment loss are as follows:

and consequently determined that it would be difficult to collect on certain investments relating to special asset groups. Therefore, the book value was written down to the recoverable amount. Moreover, idle assets for which no immediate use was foreseen and others were grouped individually, and written down to their recoverable amount. The corresponding impairment loss of 3,389 million yen was recognized under extraordinary losses.

		Millions of yen
Use and location	Classification	Amount
Offshore wind power production facilities (The Company Kita-kyushu City, Fukuoka prefecture)	Machinery	¥2,844

(Calculation of the recoverable amount)

The recoverable amount of offshore wind power production facilities was recorded at the value in use and measured as memorandum value since the estimated future cash flows are negative. The recoverable amount of idle assets was measured according to their net selling value; assets slated for sale were recorded based on their expected selling value, while other assets were appraised at a value that reflects market prices.

Consolidated Statement of Comprehensive Income

1) Reclassification adjustments and tax effects relating to other comprehensive income

		Millions of yen
Year ended March 31	2017	2018
Valuation difference on available-for-sale securities		
Amount accrued for the current year	¥3,536	¥2,180
Reclassification adjustment	140	(229)
Amount before tax effect	3,677	1,951
Tax effect	(606)	(721)
- Valuation difference on available-for-sale securities	3,071	1,229
Deferred gains or losses on hedges		
Amount accrued for the current year	3,420	(5,220)
Reclassification adjustment	4,158	24
Amount before tax effect	7,578	(5,195)
Tax effect	(1,474)	1,061
– Deferred gains or losses on hedges	6,104	(4,134)
Foreign currency translation adjustment		
Amount accrued for the current year	(3,960)	10,385
Amount before tax effect	(3,960)	10,385
Foreign currency translation adjustment	(3,960)	10,385
Remeasurements of defined benefit plans, net of tax		
Amount accrued for the current year	5,721	1,738
Reclassification adjustment	11,522	120
Amount before tax effect	17,244	1,859
Tax effect	(4,865)	(517)
- Remeasurements of defined benefit plans, net of tax	12,379	1,341
Share of other comprehensive income of associates accounted for using equity method		
Amount accrued for the current year	(1,405)	724
Reclassification adjustment	148	87
Share of other comprehensive income of associates accounted for using equity method	(1,257)	812
Other comprehensive income	¥16,336	¥9,634

Consolidated Statement of Changes in Net Assets

For the year ended March 31, 2017

1. SHARES ISSUED

				Shares
Туре	As of April 1, 2016	Increase	Decrease	As of March 31, 2017
Common stock	183,051,100	—	_	183,051,100

2. TREASURY STOCK

				Ontares
Туре	As of April 1, 2016	Increase	Decrease	As of March 31, 2017
Treasury stock	1,191	140		1,331

Sharos

(Summary of reason of the change)

A breakdown of the increase is as follows:

Increase due to purchasing shares that are less than one voting unit: 140 shares

3. DIVIDENDS

(1) Dividends paid

Resolution	Type of shares	Total amount of dividends (Millions of yen)	Dividends per share (Yen)	Record date	Effective date
Ordinary general shareholders' meeting (June 22, 2016)	Common stock	¥6,406	¥35	March 31, 2016	June 23, 2016
Board of directors (October 31, 2016)	Common stock	6,406	35	September 30, 2016	November 30, 2016

(2) Dividends with the cut-off date in the year ended March 31, 2017 and the effective date in the year ended March 31, 2018

Resolution	Type of shares	Dividends paid from	Total amount of dividends (Millions of yen)	Dividends per share (Yen)	Record date	Effective date
Ordinary general shareholders' meeting (June 28, 2017)	Common stock	Retained earnings	¥6,406	¥35	March 31, 2017	June 29, 2017

(Note) The Corporation Law of Japan provides that an amount equal to 10% of the amount to be disbursed as distributions of capital surplus (other than the capital reserve) and retained earnings (other than the legal reserve) be transferred to the capital reserve and the legal reserve, respectively, until the sum of the capital reserve and the legal reserve equals 25% of the common stock account. Such distributions can be made at any time by resolution of the shareholders, or by the Board of Directors if certain conditions are met, except neither the capital reserve nor the legal reserve is available for distributions.

For the year ended March 31, 2018 1. SHARES ISSUED

				Shares
Туре	As of April 1, 2017	Increase	Decrease	As of March 31, 2018
Common stock	183,051,100	_	—	183,051,100

2. TREASURY STOCK

				Shares
Туре	As of April 1, 2017	Increase	Decrease	As of March 31, 2018
Treasury stock	1,331	420	_	1,751

(Summary of reason of the change)

A breakdown of the increase is as follows:

Increase due to purchasing shares that are less than one voting unit: 420 shares

3. DIVIDENDS

(1) Dividends paid

Resolution	Type of shares	Total amount of dividends (Millions of yen)	Dividends per share (Yen)	Record date	Effective date
Ordinary general shareholders' meeting (June 28, 2017)	Common stock	¥6,406	¥35	March 31, 2017	June 29, 2017
Board of directors (October 31, 2017)	Common stock	6,406	35	September 30, 2017	November 30, 2017

(2) Dividends with the cut-off date in the year ended March 31, 2018 and the effective date in the year ended March 31, 2019

Resolution	Type of shares	Dividends paid from	Total amount of dividends (Millions of yen)	Dividends per share (Yen)	Record date	Effective date
Ordinary general shareholders' meeting (June 27, 2018)	Common stock	Retained earnings	¥7,321	¥40	March 31, 2018	June 28, 2018

(Note) The Corporation Law of Japan provides that an amount equal to 10% of the amount to be disbursed as distributions of capital surplus (other than the capital reserve) and retained earnings (other than the legal reserve) be transferred to the capital reserve and the legal reserve, respectively, until the sum of the capital reserve and the legal reserve equals 25% of the common stock account. Such distributions can be made at any time by resolution of the shareholders, or by the Board of Directors if certain conditions are met, except neither the capital reserve nor the legal reserve is available for distributions.

Consolidated Statement of Cash Flows

1) The reconciliation between the balance of cash and cash equivalents at the end of year and accounts on the consolidated balance sheets

		Millions of yen
Year ended March 31	2017	2018
Cash and deposits account	¥117,240	¥129,675
Time deposits with a maturity of more than three months	(110)	(1,835)
Marketable securities with a redemption period of three months or less from the date of acquisition, included in the short-term investments account	51,324	9,000
Cash and cash equivalents	¥168,454	¥136,840

Financial Instruments

1. STATUS OF FINANCIAL INSTRUMENTS

(1) Policy for financial instruments

The Company formulates funds procurement plans based on demand for funding of capital expenditures related to the domestic electric power business, investment in the overseas power generation business, and other business. The requisite funds are then procured (mainly from the issue of bonds and loans from financial institutions). Funds temporarily in excess are invested in financial assets with a high degree of safety. The Company also procures funds for short-term working capital through borrowings and the issue of commercial papers. Derivatives are used to avoid the risks noted below and it is corporate policy not to engage in speculative transactions.

(2) Types of financial instruments and related risk

Notes and accounts receivable-trade are operating receivables exposed to client credit risk. Securities held as long-term investments are shares, etc. related to business or capital ties with the partner companies to the transactions and are exposed to the risk of fluctuation in market prices. Short-term investments consist primarily of domestic CDs (transferable deposits) and are exposed to bank credit risk.

Notes and accounts payable-trade are operating liabilities and nearly all have a payment term of one year or less. Some of these are foreign currency transactions for fuel and other imports and these are exposed to currency fluctuation risk; however, part of this is hedged through the use of foreign exchange forward contracts. Loans and bonds are used mainly for the procurement of funds required for capital investment. The redemption term is 19 years at the longest after the fiscal year settlement date. Some of these have variable interest rates and are thus exposed to interest rate fluctuation risk; however, this is hedged through the use of derivatives transactions (interest rate swaps).

Derivatives transactions consist mainly of transactions involving foreign exchange forward contracts to hedge the risk of currency fluctuation accompanying operating receivables and payables denominated in foreign currencies, interest rate swaps designed to hedge the risk of interest rate fluctuations for loans, and commodity swaps designed to hedge the risk of fluctuation in commodity prices. Please see section "4. Accounting policies – (6) Hedge accounting" under "Principles of Consolidated Financial Statements" mentioned above for the hedging methods, hedging targets, hedging policies and methods for appraising hedging effectiveness, etc.

(3) Risk management for financial instruments

a. Monitoring of credit risk (the risk that customers or counterparties may default, etc.)

In accordance with the Rules on Management of Sales, etc., each division of the Company monitors the due dates and balances of

operating receivables for each transacting partner and also maintains a perpetual grasp of changes in the state of management, etc. for these companies. Consolidated subsidiaries also follow the Rules on Management of Sales, etc. and manage business affairs in the same manner. Please note that credit risk is minimal for the domestic electric power business since transactions are conducted mainly with former 10 EPCOs, which have high credit ratings. The same applies to overseas business since transactions are conducted mainly with the Electricity Generating Authority of Thailand (EGAT).

When derivatives transactions are used, they are conducted only with financial and other institutions bearing high credit ratings to mitigate counterparty risk.

The largest amount of credit risk as of the fiscal year-end is shown in the value of financial assets exposed to credit risk on the consolidated balance sheets.

Monitoring of market risks (the risks arising from fluctuations in foreign exchange rates, interest rates and others)

The Company and some of its consolidated subsidiaries generally employ foreign exchange forward contracts to hedge the risk of currency fluctuations for foreign-denominated operating receivables and payables, as determined on a monthly basis, by currency. The Company and some of its consolidated subsidiaries also employ interest rate swaps to avoid the risk of fluctuation in interest rates on loans. The Company engages in commodity swaps to obviate the risk of fluctuation in commodity prices as well.

Regarding securities, fair values and financial conditions of issuers (partner companies) and other components are periodically monitored.

The Board of Directors sets the maximum limits for derivatives transactions by purpose, based on the Guidelines for Handling

Derivatives Transactions. These transactions are handled within those confines and the Accounting & Finance Department verifies the balances with the contracting parties. Transaction results are reported to the Board of Directors every six months as a general rule (quarterly for new transactions). Consolidated subsidiaries also adhere to the Company's Guidelines for Handling Derivatives Transactions in managing derivatives.

Monitoring of liquidity risk (the risk that the Company may not be able to meet obligations on scheduled due dates)

The Accounting & Finance Department formulates and updates financing plans in a timely manner based on reports from the various departments and manages liquidity risk through issuance of commercial papers and other means.

(4) Supplemental explanation of the estimated fair value of financial instruments

Fair value of financial instruments includes not only values based on market prices, but also values calculated in a reasonable manner for instruments that do not have a market price. Calculation of such values incorporates factors that fluctuate so values may fluctuate with the employment of different underlying assumptions and other factors. Moreover, contract amounts of derivatives transactions in "Derivatives Transactions" do not indicate the market risk related to the derivatives transactions, in and of themselves.

(5) Concentration of credit risk

As of March 31, 2018, 82% of the operating receivables are from former 10 EPCOs and the EGAT.

2. FAIR VALUE OF FINANCIAL INSTRUMENTS

Millions of yen As of March 31, 2017 Carrying value Fair value Difference ¥117,240 ¥117,240 (1) Cash and deposits (2) Notes and accounts receivable-trade 78,805 78,805 (3) Short-term investments 51,344 51,344 (4) Investment securities 42,949 42,949 Available-for-sale securities*1 42,949 42,949 Total assets 290,340 290,340 (5) Notes and accounts payable-trade 24,616 24,616 24,957 24,957 (6) Short-term loans payable (7) Bonds payable*2 684,536 ¥(29,449) 655,086 (26,716) (8) Long-term loans payable*2 939,394 966,110 Total liabilities 1.644.055 1,700,221 ¥(56,166) (9) Derivatives transactions*3 Transactions not subject to hedge accounting Transactions subject to hedge accounting (8,511)(8,511)Total derivatives transactions ¥(8,511) ¥(8,511)

The carrying values recorded on the consolidated balance sheets, fair value and differences between them are as follows. Please note that

instruments for which it is extremely difficult to ascertain a fair value are not included in the following table (see (Note 2)).

*1 Included in long-term investments on the consolidated balance sheet.

*2 Includes current portion of bonds and long-term loans payable.

*3 Indicates the net amount of receivables and payables derived from derivatives transactions.

			Millions of yen
As of March 31, 2018	Carrying value	Fair value	Difference
(1) Cash and deposits	¥129,675	¥129,675	—
(2) Notes and accounts receivable-trade	91,432	91,432	_
(3) Short-term investments	9,045	9,045	_
(4) Investment securities	43,657	43,657	_
Available-for-sale securities*1	43,657	43,657	_
Total assets	273,810	273,810	_
(5) Notes and accounts payable-trade	25,539	25,539	_
(6) Short-term loans payable	16,803	16,803	_
(7) Bonds payable*2	594,991	619,515	¥(24,523)
(8) Long-term loans payable*2	948,935	973,745	(24,810)
Total liabilities	1,586,270	1,635,603	¥(49,333)
(9) Derivatives transactions*3			
Transactions not subject to hedge accounting	(0)	(0)	_
Transactions subject to hedge accounting	(14,384)	(14,384)	_
Total derivatives transactions	¥(14,385)	¥(14,385)	_

*1 Included in long-term investments on the consolidated balance sheet.

*2 Includes current portion of bonds and long-term loans payable.

*3 Indicates the net amount of receivables and payables derived from derivatives transactions.

(Note 1) Methods to determine the estimated fair value of financial instruments and other matters related to securities and derivatives transactions

(1) Cash and deposits, (2) Notes and accounts receivable-trade, (3) Short-term investments (transferable deposits, etc.)

Since these are settled within a short period of time, their carrying value approximates fair value.

(4) Investment securities

The fair value of shares is based on quoted market prices. For information of securities by purpose of holding, please refer to "Securities."

(5) Notes and accounts payable-trade, (6) Short-term loans payable Since these are settled within a short period of time, their carrying value approximates fair value. (7) Bonds payable

The fair value of bonds issued by the Company is calculated by taking the current value of the sum of the principal and interest discounted by an interest rate which takes the time remaining on the bonds and the credit risk into consideration.

(8) Long-term loans payable

The fair value of long-term loans payable is calculated by taking the current value of the sum of the principal and interest or, in cases subject to special handling with interest rate swaps, the total principal and interest with the interest rate swaps combined, discounted by the assumed interest rate for an equivalent level of new borrowing.

(9) Derivatives transactions Refer to "Derivatives transactions."

(Note 2) Amounts of financial instruments recorded on the consolidated balance sheets for which it is extremely difficult to determine the fair value

		Millions of yen
As of March 31	2017	2018
Unlisted shares (excluding share sold on the OTC market)	¥7,137	¥7,136
Unlisted foreign shares	165	172
Capital contribution	1,537	1,536
Foreign capital contribution	¥11,226	¥11,659

The above do not have a market value and estimation of future cash flows from them or taking other measures to estimate their fair value would be impossible. Therefore, they are not included in "Available-for-sale securities." Please note that the shares of non-consolidated subsidiaries and affiliates have been omitted from the table above because they are listed under "Consolidated Balance Sheets, 3) Long-term investments in non-consolidated subsidiaries and affiliated companies."

(Note 3) Redemption schedule for receivables and securities with maturities after the end of the fiscal year

	Millions of yen
As of March 31, 2017	Due in one year or less
Cash and deposits*	¥117,240
Notes and accounts receivable-trade	78,805
Short-term investments	51,344
Investment securities	
Available-for-sale securities with maturities	—
Total	¥247,390

* Amounts in cash and deposits to be redeemed within one year or less include cash.

	Millions of yen
As of March 31, 2018	Due in one year or less
Cash and deposits*	¥129,675
Notes and accounts receivable-trade	91,432
Short-term investments	9,045
Investment securities	
Available-for-sale securities with maturities	_
Total	¥230,153

* Amounts in cash and deposits to be redeemed within one year or less include cash.

(Note 4) Bonds, long-term loans payable, and other interest-bearing debt scheduled for repayment after the end of fiscal year

				Millions of yen
As of March 31, 2017	Short-term loans payable	Bonds payable	Long-term loans payable	Total
Due in one year or less	¥24,957	¥160,100	¥48,194	¥233,252
Due after one year through two years	_	40,000	71,653	111,653
Due after two years through three years	—	60,000	96,922	156,922
Due after three years through four years	—	80,000	65,057	145,057
Due after four years through five years	—	20,000	43,171	63,171
Due after five years		¥295,000	¥614,396	¥909,396

				Millions of yen
As of March 31, 2018	Short-term loans payable	Bonds payable	Long-term loans payable	Total
Due in one year or less	¥16,803	¥40,000	¥73,892	¥130,695
Due after one year through two years	_	60,000	99,099	159,099
Due after two years through three years	_	80,000	79,936	159,936
Due after three years through four years	_	20,000	45,482	65,482
Due after four years through five years	_	20,000	83,635	103,635
Due after five years	—	¥375,000	¥566,890	¥941,890

Securities

1. AVAILABLE-FOR-SALE SECURITIES

				Millions of yen
As of March 31, 2017	Items	Amount recorded on the consolidated balance sheets	Acquisition cost	Difference
Instruments for which the amount recorded on the consolidated balance sheets exceeds the acquisition cost	Stock	¥39,709	¥21,852	¥17,857
Instruments for which the amount recorded on the consolidated balance sheets does not exceed the acquisition cost	Stock	3,240	3,477	(237)
Total		¥42,949	¥25,329	¥17,619

				Millions of yen
As of March 31, 2018	ltems	Amount recorded on the consolidated balance sheets	Acquisition cost	Difference
Instruments for which the amount recorded on the consolidated balance sheets exceeds the acquisition cost	Stock	¥41,823	¥22,462	¥19,361
Instruments for which the amount recorded on the consolidated balance sheets does not exceed the acquisition cost	Stock	1,833	2,058	(225)
Total		¥43,657	¥24,521	¥19,135

2. AVAILABLE-FOR-SALE SECURITIES SOLD IN THE FISCAL YEAR

			Millions of yen
Year ended March 31, 2017	Proceeds from	sales Gain on s	sales Loss on sales
Stock	¥1,	,442 ¥1	114 ¥87
			Millions of yen
Year ended March 31, 2018	Proceeds from	sales Gain on s	sales Loss on sales

¥1,038

¥229

Derivatives Tra	nsactions

Stock

1. DERIVATIVES TRANSACTIONS NOT SUBJECT TO HEDGE ACCOUNTING (1) Currencies

						Millions of yen
		Contr	act value, etc.	Fair value	Valuation gain/loss	Calculation of fair value
	_		Portion over			
As of March 31, 2017	Instrument	Total value	one year			
Not applicable.						
						Millions of yen
	-	Contr	act value, etc.	Fair value	Valuation gain/loss	Calculation of fair value
	-		Portion over			
As of March 31, 2018	Instrument	Total value	one year			
Transactions other than market transactions	Foreign exchange forward contracts, short positions	¥246	_	¥(0)	¥(0)	According to the forward exchange rate

2. DERIVATIVES TRANSACTIONS SUBJECT TO HEDGE ACCOUNTING

As of March 31, 2017						Millions of yen
			Con	Contract value, etc.		Calculation of fair value
		_		Portion over		
Hedging method	Instrument	Target	Total value	one year		
General settlement method	Foreign exchange forward contracts	Foreign-currency- denominated receiv- ables and payables	¥3,798	¥2,351	¥614	According to the forward exchange rate
	fixed receive/floating 355,022 338,197 (11,118)	According to the price, etc. specified by				
	Interest rate collar transactions	- Loans	19,036	18,018	(1,193)	the transacting financial institution
	Commodity swaps pay/ fixed receive/floating	Commodity	12,428	_	3,186	
Special interest rate swaps	Interest rate swaps pay/ fixed receive/floating	Loans	267,037	261,897	*	_
Total			¥657,323	¥620,464	¥(8,511)	

* Transactions subject to special interest rate swaps are settled as a combined sum with the long-term loans being hedged so the fair value is included in the fair value of the long-term loans in question.

As of March 31, 2018						Millions of yen
			Con	tract value, etc.	Fair value	Calculation of fair value
Hedging method	Instrument	Target	Total value	Portion over one year		
General settlement method	Foreign exchange forward contracts	Foreign-currency- denominated receiv- ables and payables	¥1,751	_	¥(48)	According to the forward exchange rate
	Interest rate swaps pay/ fixed receive/floating		295,967	¥278,232	(14,082)	According to the price, etc. specified by the
	Interest rate collar transactions	- Loans	18,653	17,599	(1,061)	transacting financial institution
	Commodity swaps pay/ fixed receive/floating	Commodity	19,631	_	808	
Special interest rate swaps	Interest rate swaps pay/ fixed receive/floating	Loans	261,897	258,556	*	
Total			¥597,901	¥554,388	¥(14,384)	

* Transactions subject to special interest rate swaps are settled as a combined sum with the long-term loans being hedged so the fair value is included in the fair value of the long-term loans in question.

Employee Retirement Benefit Plans

1. SUMMARY OF EMPLOYEE RETIREMENT BENEFIT PLANS ADOPTED

The Company and some of its domestic consolidated subsidiaries have adopted funded type defined benefit corporate pension plans and unfunded lump-sum retirement benefit plans and both use a point system where retirement allowance points, which become the basis for calculating payment amounts, are accumulated.

Defined benefit corporate pension plans (which are all funded types) provide annuities and lump sums based on calculations using accumulated points and the number of years served, etc. The Company has adopted a quasi-cash balance plan for its defined benefit corporate pension plan and annuity amounts fluctuate depending on the market interest rate.

Lump-sum retirement benefit plans (which is unfunded, but some have become a funded type plan as a result of setting a retirement benefit trust) supplies lump sums based on accumulated points and length of employment. Also, when an employee retires, there are cases when premium severance payments are made that are not in the scope of retirement benefit obligations calculated following retirement benefit accounting.

2. DEFINED BENEFIT PLANS (EXCLUDING PLANS USING A SIMPLIFIED METHOD)(1) The changes in the retirement benefit obligations during the year

		Millions of yen
Year ended March 31	2017	2018
Balance at the beginning of the year	¥156,719	¥151,906
Service cost	6,542	6,252
Interest cost	590	839
Incurred actuarial gain or loss	(4,248)	283
Retirement benefit payments	(7,695)	(7,254)
Other	(2)	4
Balance at the end of the year	¥151,906	¥152,032

(2) The changes in the plan assets during the year

		Millions of yen
Year ended March 31	2017	2018
Balance at the beginning of the year	¥90,806	¥93,828
Expected return on plan assets	2,621	2,729
Incurred actuarial gain or loss	1,472	2,022
Funding by the Company and its subsidiaries	3,337	2,377
Retirement benefit payments	(4,410)	(4,103)
Balance at the end of the year	¥93,828	¥96,855

(3) The table set forth the funded status of the plans and the amounts recognized in the consolidated balance sheet for the Company's and the consolidated subsidiaries' defined benefit plans

		Millions of yen
As of March 31	2017	2018
Retirement benefit obligations of funded type plans	¥143,425	¥143,338
Plan assets	(93,828)	(96,855)
	49,596	46,483
Retirement benefit obligations of unfunded type plans	8,480	8,693
Net amount of liabilities and assets on the consolidated balance sheet	58,077	55,176
Net defined benefit liability	58,079	55,176
Net defined benefit asset	(2)	_
Net amount of liabilities and assets on the consolidated balance sheet	¥58,077	¥55,176

(4) Retirement benefit expenses

		Millions of yen
Year ended March 31	2017	2018
Service cost	¥6,477	¥6,164
Interest cost	574	825
Expected return on plan assets	(2,542)	(2,626)
Amortization of actuarial gain or loss	11,522	120
Other	92	111
Retirement benefit expenses regarding defined benefit plans	¥16,124	¥4,595

(5) Remeasurements of defined benefit plans, net of tax

A breakdown of remeasurements of defined benefit plans (before tax effect) is as follows:

		Millions of yen
Year ended March 31	2017	2018
Actuarial gain or loss	¥17,244	¥1,859
Total	¥17,244	¥1,859

(6) Remeasurements of defined benefit plans (before tax effect)

A breakdown of remeasurements of defined benefit plans in accumulated other comprehensive income (before tax effect) is as follows:

		Millions of yen
As of March 31	2017	2018
Unrecognized actuarial gain or loss	¥614	¥(1,245)
Total	¥614	¥(1,245)

(7) Plan assets

a. A breakdown of plan assets

Proportion of each type of asset is as follows:

As of March 31	2017	2018
Bonds	25%	25%
Stocks	32%	33%
General accounts	38%	37%
Other	5%	5%
Total	100%	100%

b. Long-term expected rate of return

In order to set long-term expected rate of return for plan assets, the current and expected allocation of plan assets and the current and future expected long-term return ratios for the various assets that compose the plan assets are taken into consideration.

(8) The actuarial assumptions

Main actuarial assumptions at the end of the fiscal year (presented in weighted average)

Year ended March 31	2017	2018
Discount rate	0.6%	0.5%
Long-term expected rate of return on plan assets	2.9%	2.9%
Expected rate of increase in salary	3.6%	3.6%

Income Taxes

1. THE SIGNIFICANT COMPONENTS OF DEFERRED TAX ASSETS AND LIABILITIES

		Millions of yen
As of March 31	2017	2018
Deferred tax assets		
Net defined benefit liability	¥18,023	¥17,235
Unrealized gain on fixed assets	12,835	13,243
Excess of depreciation of fixed assets	4,097	4,839
Amount assigned for bonuses, etc. but not yet paid	2,296	2,307
Excess of amortization of deferred assets for tax purposes	760	681
Other	38,403	42,474
Subtotal of deferred tax assets	76,416	80,783
Valuation allowance	(11,986)	(13,788)
Total deferred tax assets	64,430	66,994
Deferred tax liabilities		
Valuation difference on available-for-sale securities	(4,419)	(5,141)
Other	(38,325)	(36,452)
Total deferred tax liabilities	(42,744)	(41,593)
Net deferred tax assets	¥21,686	¥25,400

(Note) The net amount of deferred tax asset is included in the accounts below on the consolidated balance sheets.

		Millions of yen	
As of March 31	2017	2018	
Noncurrent assets – Deferred tax assets	¥40,514	¥42,501	
Current assets – Deferred tax assets	4,564	5,411	
Noncurrent liabilities – Deferred tax liabilities	(23,387)	(22,437)	
Current liabilities – Deferred tax liabilities	¥(5)	¥(73)	

2. THE RECONCILIATION BETWEEN THE EFFECTIVE TAX RATES REFLECTED IN THE CONSOLIDATED STATEMENT OF INCOME AND THE STATUTORY TAX RATE

2017	2018
28.24%	28.24%
(8.80)%	(9.72)%
—	(3.86)%
(5.58)%	(2.77)%
(0.52)%	(2.01)%
5.86%	2.29%
12.79%	4.41%
31.99%	16.58%
	28.24% (8.80)%

(Note) In the previous fiscal year, "Tax credits" were included in "Other" but it is presented separately from the current fiscal year due to increased importance. In the previous fiscal year, "Withholding taxes in foreign countries" and "Difference of statutory tax rates between the Company and consolidated subsidiaries" were presented separately but they were included in "Other" from the current fiscal year due to diminished importance. To reflect these changes in presentation, the breakdown for the previous fiscal year is reclassified.

As a result, 5.81% presented as "Withholding taxes in foreign countries", 2.50% presented as "Difference of statutory tax rates between the Company and consolidated subsidiaries", and 3.96% presented as "Other" in the previous fiscal year are reclassified (0.52)% as "Tax credits" and 12.79% as "Other".

3 .EFFECT OF TAX CUTS AND JOBS ACT

The Tax Cuts and Jobs Act was enacted in the United States on 22 December 2017 and the federal corporate income tax rate applied by consolidated subsidiaries in the United States was reduced from 35% to 21%. Deferred tax liabilities (the amount after

deducting deferred tax assets) decreased by 3,970 million yen, income tax-deferred decreased by 3,823 million yen, and deferred gains or losses on hedges increased by 146 million yen due to this tax rate reduction.

Asset retirement obligations

Asset retirement obligations recorded on the consolidated balance sheet

(1) Overview of the asset retirement obligations

This represents restoration obligations due to real estate lease agreements relating to noncurrent assets of electric utility plant and equipment, and due to power purchase agreements in overseas business.

(2) Method of calculating amount of asset retirement obligations

The amount of asset retirement obligations is calculated by using expected period of use of 0 to 50 years from the acquisition and discounting with discount rates between -0.1% and 5.0%.

(3) Increase/decrease of the asset retirement obligations

As stated in "Changes in accounting methods", the Company has recorded "Asset retirement obligations" as a restoration obligation due to a real estate lease agreement of part of the consolidated subsidiaries that operates the wind power generation business. The Company changed estimates of the recovery cost, through obtaining new information such as recent actual restoration costs.

The amount of 11,863 million yen, which is discounted using discount rates between -0.1% and 5.0%, reflects the change in estimate, and is added to the amount of "Asset retirement obligations" before the estimate change.

The following table indicates the changes in asset retirement obligations for the years ended March 31, 2017 and 2018:

		Millions of yen
As of March 31	2017	2018
Balance at the beginning of the year	¥12,231	¥12,564
Liabilities incurred due to the acquisition of property, plant and equipment	207	2,574
Accretion expense	378	408
Increase due to estimate change		13,888
Liabilities settled		(583)
Other	(343)	(26)
Balance at the end of the year	¥12,564	¥28,826

Segment Information, etc.

(Segment Information)

1. OVERVIEW OF REPORTABLE SEGMENT

The Company's reportable segments are those for which separate financial information for each structural unit is available and are subject to be regularly reviewed by the Board of Directors to determine the distribution of management resources and evaluate performance.

The J-POWER Group is comprised of J-POWER (parent company), 71 subsidiaries and 107 affiliates (as of March 31, 2018), of which the core business is generating business utilizing power plants owned by J-POWER group companies including hydroelectric, thermal and wind. Through the Group's power transmission and transforming facilities the Group also engages in transmission business, providing transmission services to nine transmission and distribution companies, excluding The Okinawa Electric Power Company. The J-POWER Group's business is separated into 4 reportable segments of "Electric Power Business" conducted by the parent company, subsidiaries and affiliates; "Electric Power Related Business" that complements and contributes to the smooth and efficient implementation of the electric power business; "Overseas Business" that engages in overseas power generation business and businesses related to this; and "Other Business" which consists of various business activities including the sale of coal that fully utilizes the Group's management resources and know-how.

2. METHOD OF CALCULATING AMOUNT IN SALES, INCOME OR LOSS, ASSETS AND OTHER ITEMS IN REPORTABLE SEGMENTS

The method of accounting for the reportable segments is the same as that stated in "Summary of Significant Accounting Policies." The income of reportable segments is calculated on the basis of ordinary income. Intersegment internal revenues and transferred amounts are based on current market prices.

3. INFORMATION CONCERNING AMOUNTS IN SALES, INCOME OR LOSS, ASSETS AND OTHER ITEMS FOR EACH REPORTABLE SEGMENT

							Millions of yen
		R	eportable segments				
For the year ended March 31, 2017	Electric power	Electric power related	Overseas	Other	Total	Adjustments *1	Consolidated *2
Sales							
Sales to external customers	¥538,558	¥34,004	¥149,888	¥21,950	¥744,402	—	¥744,402
Intersegment sales and transfer	1,683	323,357	—	2,038	327,079	¥(327,079)	_
Total sales	540,241	357,362	149,888	23,989	1,071,482	(327,079)	744,402
Segment income	22,212	14,244	31,229	1,376	69,063	(1,912)	67,150
Segment assets	1,885,892	248,751	617,442	18,559	2,770,646	(164,360)	2,606,285
Other items							
Depreciation and amortization	54,650	5,975	16,448	314	77,389	(1,728)	75,660
Interest income	124	299	634	72	1,131	(107)	1,024
Interest expenses	15,470	139	14,201	94	29,905	(107)	29,798
Equity income of affiliates	110	—	13,148		13,258	—	13,258
Investment in affiliates	16,192	_	163,074	_	179,266	—	179,266
Increase in tangible and intangible noncurrent assets	¥107,841	¥2,153	¥1,358	¥553	¥111,907	¥(6,070)	¥105,837

(Notes) 1. The breakdown of adjustments is as follows:

(1) The adjustment amount of (1,912) million yen in segment income includes elimination of transaction amounts between segments of (1,951) million yen.
 (2) The adjustment amount of (164,360) million yen in segment assets includes elimination of (153,714) million yen for the offsetting of receivables.

(3) The adjustment amount of (1,728) million yen in depreciation and amortization includes elimination of transaction amounts between segments of (1,676) million yen.

(4) The adjustment amounts for interest income, interest expenses, and increase in tangible and intangible noncurrent assets are amounts eliminated as transactions between segments.

2. Segment income is adjusted with ordinary income on consolidated financial statements.

							Millions of yen
		R	eportable segments				
For the year ended March 31, 2018	Electric power	Electric power related	Overseas	Other	Total	Adjustments *1	Consolidated *2
Sales							
Sales to external customers	¥631,923	¥36,934	¥163,084	¥24,309	¥856,252	_	¥856,252
Intersegment sales and transfer	1,792	375,799	_	2,948	380,539	¥(380,539)	_
Total sales	633,715	412,734	163,084	27,258	1,236,792	(380,539)	856,252
Segment income	39,561	23,098	40,528	1,258	104,446	(1,970)	102,476
Segment assets	1,896,026	265,834	637,741	17,979	2,817,581	(170,359)	2,647,221
Other items							
Depreciation and amortization	60,606	5,786	17,443	282	84,118	(1,819)	82,298
Interest income	118	314	885	68	1,387	(99)	1,287
Interest expenses	14,178	133	14,083	92	28,487	(99)	28,387
Equity income of affiliates	178	_	9,543	_	9,721	_	9,721
Investment in affiliates	17,473	—	164,667	_	182,140	—	182,140
Increase in tangible and intangible noncurrent assets	¥100,129	¥3,639	¥5,018	¥346	¥109,134	¥(10,417)	¥98,716

(Notes) 1. The breakdown of adjustments is as follows:

(1) The adjustment amount of (1,970) million yen in segment income includes elimination of transaction amounts between segments of (1,996) million yen.

(2) The adjustment amount of (170,359) million yen in segment assets includes elimination of (154,665) million yen for the offsetting of receivables.

(3) The adjustment amount of (1,819) million yen in depreciation and amortization includes elimination of transaction amounts between segments of (1,768)

million yen.

(4) The adjustment amounts for interest income, interest expenses, and increase in tangible and intangible noncurrent assets are amounts eliminated as transactions between segments.

2. Segment income is adjusted with ordinary income on consolidated financial statements.

(Related information)

For the year ended March 31, 2017

1. INFORMATION BY PRODUCTS AND SERVICES

The information is omitted as similar information is disclosed in segment information.

2. REGIONAL INFORMATION

(1) Operating revenue

				Millions of yen
	Japan	Thailand	Other	Total
Operating revenue	¥566,029	¥148,822	¥29,551	¥744,402

(Note) Sales are classified by countries or regions based on locations of customers.

(2) Tangible noncurrent assets

				Millions of yen
	Japan	Thailand	Other	Total
Tangible noncurrent assets	¥1,428,838	¥313,547	¥28,335	¥1,770,720

3. SALES TO MAIN CUSTOMERS

		Millions of yen
	Amount of sales	Related segment
Electricity Generating Authority of Thailand (EGAT)	¥138,830	Overseas business
The Chugoku Electric Power Company, Incorporated	111,599	Electric power business
TEPCO Energy Partner, Incorporated	93,701	Electric power business
The Kansai Electric Power Company, Incorporated	¥88,888	Electric power business

For the year ended March 31, 2018

1. INFORMATION BY PRODUCTS AND SERVICES

The information is omitted as similar information is disclosed in segment information.

2. REGIONAL INFORMATION

(1) Operating revenue

				Millions of yen
	Japan	Thailand	Other	Total
Operating revenue	¥660,245	¥162,318	¥33,688	¥856,252

(Note) Sales are classified by countries or regions based on locations of customers.

(2) Tangible noncurrent assets

				Millions of yen
	Japan	Thailand	Other	Total
Tangible noncurrent assets	¥1,469,711	¥322,002	¥29,397	¥1,821,111

3. SALES TO MAIN CUSTOMERS

		Millions of yen
	Amount of sales	Related segment
Electricity Generating Authority of Thailand (EGAT)	¥150,935	Overseas business
The Chugoku Electric Power Company, Incorporated	132,024	Electric power business
The Kansai Electric Power Company, Incorporated	100,471	Electric power business
TEPCO Energy Partner, Incorporated	¥99,071	Electric power business

(Impairment loss on noncurrent assets by reportable segments)

For the year ended March 31, 2017

					Millions of yen
		Electric power			
	Electric power	related	Overseas	Other	Total
Impairment loss	¥17	¥2,607	—	—	¥2,624

For the year ended March 31, 2018

					Millions of yen
		Electric power			
	Electric power	related	Overseas	Other	Total
Impairment loss	¥3,034	¥27	—	¥327	¥3,389

(Information about amortization and balance of goodwill by reportable segments)

For the year ended March 31, 2017 Not applicable.

For the year ended March 31, 2018 Not applicable.

(Information about gain on negative goodwill by reportable segments)

For the year ended March 31, 2017 Not applicable.

For the year ended March 31, 2018 Not applicable.

Related party information

1. SUMMARY OF FINANCIAL INFORMATION OF IMPORTANT AFFILIATES

For the year ended March 31, 2017 Type	Affiliate
Company name	PT. BHIMASENA POWER INDONESIA
Location	Jakarta, Indonesia
Capital or contribution (Millions of U.S. dollars)	10
Business description	Thermal power business
Ownership of voting rights (%)	Direct 34.0
Relationship with related party	Guarantee of Ioan / Interlocking directors
Transaction	Guarantee of loan *1, *2
Amount of transaction (Millions of yen)	33,835
Account name	_
Balance at the end of current period (Millions of yen)	_

*1 The consumption taxes are not included in the amount stated above.

*2 Terms and conditions, and policy for determining terms and conditions

The Company executes guarantees of loans from financial institutions.

The Company executes guarantees of loans for the letters of guarantee of power sales agreements of financial institutions.

For the year ended March 31, 2018

Туре	Affiliate
Company name	PT. BHIMASENA POWER INDONESIA
Location	Jakarta, Indonesia
Capital or contribution (Millions of U.S. dollars)	10
Business description	Thermal power business
Ownership of voting rights (%)	Direct 34.0
Relationship with related party	Guarantee of Ioan / Interlocking directors
Transaction	Guarantee of loan *1, *2
Amount of transaction (Millions of yen)	32,040
Account name	_
Balance at the end of current period (Millions of yen)	_

*1. The consumption taxes are not included in the amount stated above.

*2. Terms and conditions, and policy for determining terms and conditions

The Company executes guarantees of loans from financial institutions.

The Company executes guarantees of loans for the letters of guarantee of power sales agreements of financial institutions.

Per share information

		Yen
Year ended March 31	2017	2018
Net assets per share	¥3,954.22	¥4,300.98
Earnings per share	¥226.33	¥373.93

(Notes) 1. Since there were no potential shares such as bonds with subscription right to shares, diluted earnings per share is not indicated.

2. The basis of calculation of earnings per share is shown below.

Year ended March 31		2017	2018
Profit attributable to owners of parent	Millions of yen	¥41,429	¥68,448
Amount not attributable to ordinary shareholders	Millions of yen	_	_
Profit attributable to owners of parent related to common stock	Millions of yen	¥41,429	¥68,448
Weighted average number of common stock outstanding during the year	Thousands of shares	183,049	183,049

3. The basis of calculation of net assets per share is shown below.

As of March 31		2017	2018
Total net assets	Millions of yen	¥764,019	¥836,124
Amount deducted from total net assets	Millions of yen	¥40,200	¥48,833
(non-controlling interests included in the above)		¥(40,200)	¥(48,833)
Year-end net assets related to common stock	Millions of yen	¥723,819	¥787,291
The number of common stock used in the calculation of net assets per share	Thousands of shares	183,049	183,049

Significant Subsequent Events

Not applicable.

Schedule of Bonds Payable

Electric Power Development Co., Ltd. straight bond

No. Issued date Millors of yen % Secured Altreacued Term of indemption (lung-sum) 3 Mar.2, 2004 110,000 110,000 2.010 Unsecured Dec. 20, 2024 6 Nov.2, 2004 10,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 21,010 Unsecured Mar. 19, 2025 15 Oct.20, 2005 20,000 20,000 21,010 Unsecured Jan. 20, 2025 19 Aug. 20, 2007 27,198 — 1,740 Unsecured Jan. 20, 2017 21 Apr.24, 2008 26,598 — 1,800 Unsecured Mar. 20, 2018 22 Apr.24, 2008 28,298 — 1,800 Unsecured Mar. 20, 2018 23 Mar. 21, 2009 14,991 2,220 Unsecured Mar. 20, 2018 24 Mar. 24, 2018 24,900 20,000 1,474 Unsecured Aug. 20, 2019 26 Mar. 12, 200			Balance as of Mar. 31, 2017 Balance as of Mar. 31, 2018 Interest rat		Interest rate		
5 Nov. 2, 2004 10,000 10,000 2,240 Unsecured Sep. 20,224 11 Jun. 7, 2005 20,000 20,000 2,050 Unsecured Mar. 19, 2025 13 Jul. 22, 2005 20,000 20,000 2,040 Unsecured Jun. 20, 2025 15 Oct. 20, 2005 20,000 2,0100 2,110 Unsecured Jun. 20, 2025 19 Aug. 20, 2007 27,198 - 1,740 Unsecured Sep. 20, 2017 22 Apr. 24, 2008 26,598 - 1,600 Unsecured Mar. 20, 2018 24 Apr. 24, 2008 28,598 - 1,800 Unsecured Mar. 20, 2019 26 Mar. 12, 2009 14,991 14,991 2,200 Unsecured Mar. 20, 2019 28 Aug. 28, 2009 20,000 20,000 1,810 Unsecured May. 20, 2019 29 Mar. 12, 2009 14,991 1,220 Unsecured May. 20, 2019 20,000 20,000 1,816 Unsecu	No.	Issued date	Millions of yen	Millions of yen		Secured /Unsecured	Term of redemption (lump-sum)
B Feb. 24, 2005 20,000 20,000 2,110 Unsecured Dec. 20, 2024 11 Jult, 22, 2005 20,000 20,000 2,040 Unsecured Jult, 20, 2025 15 Oct, 20, 2007 29,299 — 1.940 Unsecured Sep. 19, 2025 20, 2007 29,299 — 1.740 Unsecured Sep. 20, 2017 21 Nov. 20, 2007 22,8699 — 1.660 Unsecured Sep. 20, 2017 21 Nov. 20, 2007 28,689 — 1.800 Unsecured Mar. 20, 2018 28 May 0,2008 28,698 — 1.800 Unsecured Mar. 20, 2018 28 May 0,2008 28,298 — 1.800 Unsecured Mar. 20, 2019 20 Mar. 12, 2009 20,000 20,000 1.610 Unsecured Mar. 20, 2019 20 Nay 21, 2009 20,000 20,000 1.668 Unsecured May 20, 2019 20 Nov 30, 2009 20,000 20,000	3	Mar. 2, 2004	¥10,000	¥10,000	2.010	Unsecured	Dec. 20, 2023
11 Jun. 7, 2005 20,000 20,000 2.080 Unsecured Mar. 19, 2025 15 Oct. 20, 2005 20,000 20,000 2.110 Unsecured Sep. 19, 2025 19 Aug. 20, 2007 29,299 — 1.340 Unsecured Sep. 20, 2017 21 Nov. 20, 2007 28,699 — 1.660 Unsecured Sep. 20, 2017 22 Apr. 24, 2008 26,598 — 1.600 Unsecured Mar. 20, 2018 23 May 30, 2008 28,298 — 1.820 Unsecured Mar. 20, 2019 26 Mar. 12, 2009 14,991 14,991 2.200 Unsecured Mar. 20, 2019 26 Mar. 12, 2009 20,000 20,000 1.608 Unsecured Mar. 20, 20, 202 27 May 21, 2009 20,000 20,000 1.4091 Lase Mar. 18, 202, 202 27 May 21, 2009 20,000 20,000 1.474 Unsecured May. 20, 2019 28 Mar. 12, 2010 20,	5	Nov. 2, 2004	10,000	10,000	2.240	Unsecured	Sep. 20, 2024
13 Jul. 22, 2005 20,000 20,000 2.101 Unsecured Jun. 20, 2025 15 Oct. 20, 2005 20,000 20,000 2.110 Unsecured Sep. 12, 2025 19 Aug. 20, 2007 29,299 — 1.940 Unsecured Sep. 20, 2017 20 Sep. 27, 2007 27, 198 — 1.600 Unsecured Sep. 20, 2017 21 Nov. 20, 2007 28,699 — 1.600 Unsecured Mar. 20, 2018 23 May 30, 2008 28,298 — 1.820 Unsecured Mar. 20, 2018 26 Mar. 12, 2009 20,000 *20,000 1.610 Unsecured Mar. 20, 2019 26 Mar. 12, 2009 20,000 20,000 1.608 Unsecured Mar. 20, 2019 27 May 21, 2009 20,000 20,000 1.405 Unsecured May. 20, 2019 28 May 30, 2019 20,000 20,000 1.474 Unsecured May. 20, 2019 29 Nov. 30, 2009 20,	8	Feb. 24, 2005	20,000	20,000	2.110	Unsecured	Dec. 20, 2024
16 Oct. 20, 2005 20,000 20,000 21.10 Unsecured Sep. 19, 2025 20 Sep. 27, 2007 27, 198 — 1,740 Unsecured Sep. 20, 2017 21 Nov. 20, 2007 28, 699 — 1,660 Unsecured Sep. 20, 2017 22 Apr. 24, 2008 26, 598 — 1,660 Unsecured Mar. 20, 2018 23 May 30, 2008 28, 298 — 1,820 Unsecured Mar. 20, 2019 26 Mar. 12, 2009 14,991 14,891 2,220 Unsecured Mar. 20, 2019 28 May 28, 2009 20,000 20,000 1,608 Unsecured May 20, 2019 29 Nov. 30, 2009 20,000 20,000 1,405 Unsecured May 20, 2019 30 May 20, 2010 20,000 20,000 1,405 Unsecured May 20, 2020 31 Sep. 9, 2010 20,000 20,000 1,422 Unsecured May 20, 2020 32 Decc. 9, 2010 20,000	11	Jun. 7, 2005		20,000	2.050	Unsecured	Mar. 19, 2025
Hay Aug. 20, 2007 29, 299 — 1,940 Unsecured Jun 20, 2017 20 Sep. 27, 2007 27, 198 — 1,740 Unsecured Sep. 20, 2017 21 Nov. 20, 2007 28,689 — 1,680 Unsecured Mar. 20, 2018 23 May 30, 2008 28,288 — 1,820 Unsecured Mar. 20, 2019 26 Mar. 12, 2009 20,000 *20,000 1,610 Unsecured Mar. 20, 2019 26 Mar. 12, 2009 20,000 20,000 1,616 Unsecured May 20, 2019 28 Aug. 28, 2009 20,000 20,000 1,405 Unsecured May 20, 2019 29 Nov. 30, 2009 20,000 20,000 1,405 Unsecured May 20, 2019 30 May 20, 2010 20,000 20,000 1,145 Unsecured Sep. 18, 2020 31 Sep. 9, 2010 20,000 20,000 1,285 Unsecured Sep. 18, 2020 32 Feb. 24, 2011 20,00	13	Jul. 22, 2005	20,000	20,000	2.040	Unsecured	Jun. 20, 2025
20 Sep. 27, 2007 27, 198 — 1.740 Unsecured Sep. 20, 2017 21 Nov. 20, 2007 28,699 — 1.690 Unsecured Mar, 20, 2018 22 Apr. 24, 2008 28,598 — 1.600 Unsecured Mar, 20, 2018 25 Mar, 12, 2009 20,000 **20,000 1.610 Unsecured Mar, 20, 2019 26 Mar, 12, 2009 14,991 14,991 2.220 Unsecured Mar, 20, 2019 27 May 21, 2009 20,000 20,000 1.606 Unsecured May, 20, 2019 28 Aug, 28, 2009 20,000 20,000 1.474 Unsecured May, 20, 2019 29 Nov, 30, 2009 20,000 20,000 1.434 Unsecured May, 20, 2020 31 Sep. 9, 2010 20,000 20,000 1.285 Unsecured Dec, 18, 2020 32 Dec, 9, 2010 20,000 -0.592 Unsecured Oet, 20, 2027 35 Feb. 24, 2011 20,000	15	Oct. 20, 2005	20,000	20,000	2.110	Unsecured	Sep. 19, 2025
1 Nov 20, 2007 28, 699 — 1.690 Unsecured Sep. 20, 2017 22 Apr. 24, 2008 26, 598 — 1.800 Unsecured Mar. 20, 2018 25 Mar. 12, 2009 20,000 "20,000 1.610 Unsecured Mar. 20, 2018 26 Mar. 12, 2009 20,000 20,000 1.610 Unsecured Mar. 20, 2019 26 Mar. 12, 2009 20,000 20,000 1.608 Unsecured May 20, 2019 27 May 21, 2009 20,000 20,000 1.474 Unsecured May 20, 2019 28 Aug. 28, 2009 20,000 20,000 1.474 Unsecured May 20, 2019 29 Nov. 30, 2009 20,000 20,000 1.55 Unsecured May 20, 2010 31 Sep. 9, 2010 20,000 20,000 1.265 Unsecured Sep. 18, 2020 32 Dec. 9, 2010 20,000 20,000 1.285 Unsecured Sep. 20, 2017 35 Galay 30, 2013 <t< td=""><td>19</td><td>Aug. 20, 2007</td><td>29,299</td><td>—</td><td>1.940</td><td>Unsecured</td><td>Jun. 20, 2017</td></t<>	19	Aug. 20, 2007	29,299	—	1.940	Unsecured	Jun. 20, 2017
22 Apr. 24, 2008 26,598 — 1.600 Unsecured Mar. 20, 2018 23 May 30, 2008 28,298 — 1.820 Unsecured Mar. 20, 2019 26 Mar. 12, 2009 14,991 14,991 2.220 Unsecured Dec. 20, 2028 27 May 21, 2009 20,000 20,000 1.608 Unsecured May 20, 2019 28 Aug. 28, 2009 20,000 20,000 1.474 Unsecured May 20, 2019 29 Nov. 30, 2009 20,000 20,000 1.394 Unsecured Nov. 20, 2019 30 May 20, 2010 20,000 20,000 1.455 Unsecured Sep. 18, 2020 31 Sep. 9, 2010 20,000 20,000 1.455 Unsecured Sep. 18, 2020 32 Feb. 24, 2011 20,000 20,000 1.422 Unsecured Sep. 18, 2020 33 Feb. 24, 2011 20,000 0.000 1.285 Unsecured Sep. 20, 2017 34 Sep. 14, 2012 <td< td=""><td>20</td><td>Sep. 27, 2007</td><td>27,198</td><td>—</td><td>1.740</td><td>Unsecured</td><td>Sep. 20, 2017</td></td<>	20	Sep. 27, 2007	27,198	—	1.740	Unsecured	Sep. 20, 2017
23 May 30, 2008 28,298 — 1,820 Unsecured Mar. 20, 2018 25 Mar. 12, 2009 20,000 "20,000 1,610 Unsecured Mar. 20, 2019 26 Mar. 12, 2009 20,000 20,000 1,608 Unsecured May 20, 2019 27 May 21, 2009 20,000 20,000 1,406 Unsecured May 20, 2019 28 Aug. 28, 2009 20,000 20,000 1,405 Unsecured May. 20, 2019 30 May 20, 2010 20,000 20,000 1,494 Unsecured May. 20, 2020 31 Sep. 9, 2010 20,000 20,000 1,485 Unsecured Dec. 18, 2020 33 Feb. 14, 2012 20,000 20,000 1,422 Unsecured Dec. 18, 2020 34 Sep. 14, 2012 20,000 20,000 1,422 Unsecured Dec. 18, 2020 35 Feb. 14, 2012 20,000 20,000 1,422 Unsecured Dec. 18, 2020 36 May 30, 2013	21	Nov. 20, 2007	28,699	_	1.690	Unsecured	Sep. 20, 2017
25 Mar. 12, 2009 20,000 ** 20,000 1.610 Unsecured Mar. 20, 2019 26 Mar. 12, 2009 14,991 14,991 2.220 Unsecured Dec. 20, 2028 27 May 21, 2009 20,000 20,000 1.608 Unsecured May 20, 2019 28 Aug. 28, 2009 20,000 20,000 1.405 Unsecured May 20, 2019 30 May 20, 2010 20,000 20,000 1.394 Unsecured May 20, 2020 31 Sep. 9, 2010 20,000 20,000 1.285 Unsecured Dec. 18, 2020 32 Dec. 9, 2010 20,000 20,000 1.422 Unsecured Dec. 18, 2020 33 Feb. 24, 2011 20,000 20,000 1.422 Unsecured Oct. 20, 2021 34 Sep. 14, 2012 20,000 20,000 1.126 Unsecured Oct. 20, 2022 35 May 30, 2013 20,000 20,000 1.717 Unsecured May 18, 2017 36 May 30, 2013	22	Apr. 24, 2008	26,598	—	1.600	Unsecured	Mar. 20, 2018
26 Mar. 12, 2009 14,991 14,991 2.220 Unsecured Dec. 20, 2028 27 May 21, 2009 20,000 20,000 1.608 Unsecured May 20, 2019 28 Aug. 28, 2009 20,000 20,000 1.474 Unsecured Aug. 20, 2019 30 May 20, 2010 20,000 20,000 1.394 Unsecured May. 20, 2019 31 Sep. 9, 2010 20,000 20,000 1.155 Unsecured Sep. 18, 2020 32 Dec. 9, 2010 20,000 20,000 1.428 Unsecured Sep. 18, 2020 33 Sep. 14, 2012 20,000 20,000 1.422 Unsecured Sep. 20, 2017 34 Sep. 14, 2012 20,000 20,000 1.126 Unsecured Sep. 20, 2017 35 Oct. 22, 2012 20,000 20,000 1.035 Unsecured Jul. 20, 2022 36 May 30, 2013 20,000 20,000 0.978 Unsecured Jul. 20, 2024 37 Jul. 25, 2013	23	May 30, 2008	28,298	—	1.820	Unsecured	Mar. 20, 2018
27 May 21, 2009 20,000 20,000 1.608 Unsecured May 20, 2019 28 Aug. 28, 2009 20,000 20,000 1.474 Unsecured Aug. 20, 2019 30 May 20, 2010 20,000 20,000 1.405 Unsecured May 20, 2020 31 Sep. 9, 2010 20,000 20,000 1.155 Unsecured May 20, 2020 32 Dec. 9, 2010 20,000 20,000 1.285 Unsecured Dec. 18, 2020 33 Feb. 24, 2011 20,000 20,000 1.422 Unsecured Sep. 92, 2017 35 Oct. 22, 2012 20,000 20,000 1.126 Unsecured May 18, 2018 37 Jul. 25, 2013 20,000 20,000 0.717 Unsecured May 18, 2018 38 Dec. 16, 2013 20,000 20,000 0.735 Unsecured Jul. 20, 2024 44 Sep. 24, 2014 20,000 20,000 0.782 Unsecured Jul. 20, 2024 45 Not, 25, 2013	25	Mar. 12, 2009	20,000	*1 20,000	1.610	Unsecured	Mar. 20, 2019
28 Aug. 28, 2009 20,000 20,000 1.474 Unsecured Aug. 20, 2019 29 Nox. 30, 2009 20,000 20,000 1.405 Unsecured Nov. 20, 2019 30 May. 20, 2010 20,000 20,000 1.394 Unsecured May. 20, 2020 31 Sep. 9, 2010 20,000 20,000 1.285 Unsecured Sep. 18, 2020 32 Dec. 9, 2010 20,000 20,000 1.425 Unsecured Feb. 19, 2021 34 Sep. 14, 2012 20,000 - 0.592 Unsecured Sep. 20, 2017 35 Oct. 22, 2012 20,000 20,000 1.126 Unsecured Oct. 20, 2022 36 May 30, 2013 20,000 20,000 0.717 Unsecured May 18, 2018 37 Jul. 25, 2013 20,000 20,000 0.978 Unsecured Dec. 20, 2024 40 Jun. 11, 2014 20,000 20,000 0.889 Unsecured Aug. 20, 2024 41 Sep. 2, 2014	26	Mar. 12, 2009	14,991	14,991	2.220	Unsecured	Dec. 20, 2028
29 No. 30, 2009 20,000 20,000 1.405 Unsecured Nov. 20, 2019 30 May 20, 2010 20,000 1.394 Unsecured May. 20, 2020 31 Sep. 9, 2010 20,000 1.155 Unsecured Sep. 18, 2020 32 Dec. 9, 2010 20,000 20,000 1.285 Unsecured Sep. 18, 2020 33 Feb. 24, 2011 20,000 20,000 1.422 Unsecured Sep. 19, 2021 34 Sep. 14, 2012 20,000 - 0.592 Unsecured Oct. 20, 2022 36 May 30, 2013 20,000 20,000 1.126 Unsecured May 18, 2018 37 Jul. 25, 2013 20,000 20,000 0.978 Unsecured Dec. 20, 2024 40 Jun. 11, 2014 20,000 20,000 0.889 Unsecured Aug. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2026 42 Apr. 18, 2016 10,000 10,000	27	May 21, 2009	20,000	20,000	1.608	Unsecured	May 20, 2019
30 May 20, 2010 20,000 1.394 Unsecured May 20, 2020 31 Sep. 9, 2010 20,000 20,000 1.155 Unsecured Sep. 18, 2020 32 Dec. 9, 2010 20,000 20,000 1.285 Unsecured Dec. 18, 2020 33 Feb. 24, 2011 20,000 20,000 1.422 Unsecured Feb. 19, 2021 34 Sep. 14, 2012 20,000 - 0.552 Unsecured Sep. 20, 2017 35 Oct. 22, 2012 20,000 20,000 1.126 Unsecured May 18, 2018 37 Jul. 25, 2013 20,000 20,000 1.035 Unsecured Dust 20, 2024 40 Jun. 11, 2014 20,000 20,000 0.978 Unsecured Aug. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2026 43 Jun. 7, 2016 10,000 10,000 0.310 Unsecured Aug. 20, 2026 44 Oct. 20,0216 10,000	28	Aug. 28, 2009	20,000	20,000	1.474	Unsecured	Aug. 20, 2019
31 Sep. 9, 2010 20,000 1.155 Unsecured Sep. 18, 2020 32 Dec. 9, 2010 20,000 20,000 1.285 Unsecured Dec. 18, 2020 33 Feb. 24, 2011 20,000 20,000 1.422 Unsecured Feb. 18, 2021 34 Sep. 14, 2012 20,000 - 0.592 Unsecured Sep. 20, 2017 35 Oct. 22, 2012 20,000 20,000 1.126 Unsecured Oct. 20, 2022 36 May 30, 2013 20,000 *120,000 0.717 Unsecured May 18, 2018 37 Jul. 25, 2013 20,000 20,000 0.978 Unsecured Jul. 20, 2021 38 Dec. 16, 2013 20,000 20,000 0.978 Unsecured Jul. 20, 2024 40 Jun. 11, 2014 20,000 20,000 0.889 Unsecured Aug. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.290 Unsecured Aug. 20, 2024 43 Jun. 7, 2016 20,000	29	Nov. 30, 2009	20,000	20,000	1.405	Unsecured	Nov. 20, 2019
32 Dec. 9, 2010 20,000 20,000 1.285 Unsecured Dec. 18, 2020 33 Feb. 24, 2011 20,000 - 0.592 Unsecured Feb. 19, 2021 34 Sep. 14, 2012 20,000 - 0.592 Unsecured Sep. 20, 2017 35 Oct. 22, 2012 20,000 20,000 0.717 Unsecured May 18, 2018 37 Jul. 25, 2013 20,000 20,000 0.717 Unsecured May 18, 2018 38 Dec. 16, 2013 20,000 20,000 0.978 Unsecured Dec. 20, 2024 40 Jun. 11, 2014 20,000 20,000 0.889 Unsecured Aur. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Apr. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Apr. 20, 2024 42 Apr. 18, 2016 10,000 10,000 0.310 Unsecured Apr. 20, 2026 43 Jun. 7, 2016 <t< td=""><td>30</td><td>May 20, 2010</td><td>20,000</td><td>20,000</td><td>1.394</td><td>Unsecured</td><td>May. 20, 2020</td></t<>	30	May 20, 2010	20,000	20,000	1.394	Unsecured	May. 20, 2020
33 Feb. 24, 2011 20,000 20,000 1.422 Unsecured Feb. 19, 2021 34 Sep. 14, 2012 20,000 - 0.592 Unsecured Sep. 20, 2017 35 Oct. 22, 2012 20,000 *20,000 1.126 Unsecured Oct. 20, 2022 36 May 30, 2013 20,000 *20,000 0.717 Unsecured May 18, 2018 37 Jul. 25, 2013 20,000 20,000 0.978 Unsecured Jul. 20, 2021 38 Dec. 16, 2013 20,000 20,000 0.978 Unsecured Dec. 20, 2023 40 Jun. 11, 2014 20,000 20,000 0.889 Unsecured Aug. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2024 42 Apr. 18, 2016 10,000 10,000 0.310 Unsecured Apr. 20, 2026 43 Jun. 7, 2016 20,000 20,000 0.290 Unsecured Jun. 20, 2026 44 Oct. 20, 2016	31	Sep. 9, 2010	20,000	20,000	1.155	Unsecured	Sep. 18, 2020
34 Sep. 14, 2012 20,000 — 0.592 Unsecured Sep. 20, 2017 35 Oct. 22, 2012 20,000 *120,000 0.717 Unsecured Oct. 20, 2022 36 May 30, 2013 20,000 *120,000 0.717 Unsecured May 18, 2018 37 Jul. 25, 2013 20,000 20,000 0.717 Unsecured Jul. 20, 2021 38 Dec. 16, 2013 20,000 20,000 0.978 Unsecured Dec. 20, 2023 39 Feb. 24, 2014 20,000 20,000 0.929 Unsecured Jul. 20, 2024 40 Jun. 11, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2024 42 Apr. 18, 2016 10,000 10,000 0.310 Unsecured Aug. 20, 2026 43 Jun. 7, 2016 20,000 20,000 0.280 Unsecured Aor. 20, 2036 45 Nov. 29, 2016	32	Dec. 9, 2010	20,000	20,000	1.285	Unsecured	Dec. 18, 2020
35 Oct. 22, 2012 20,000 1.126 Unsecured Oct. 20, 2022 36 May 30, 2013 20,000 *' 20,000 0.717 Unsecured May 18, 2018 37 Jul. 25, 2013 20,000 20,000 1.035 Unsecured Jul. 20, 2021 38 Dec. 16, 2013 20,000 20,000 0.978 Unsecured Dec. 20, 2024 40 Jun. 11, 2014 20,000 20,000 0.889 Unsecured Aug. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2024 42 Apr. 18, 2016 10,000 10,000 0.310 Unsecured Apr. 20, 2026 43 Jun. 7, 2016 20,000 20,000 0.290 Unsecured Jun. 19, 2026 44 Oct. 20,2016 10,000 10,000 0.688 Unsecured Jac. 20, 2036 45 Nov. 29, 2016 10,000 10,000 0.260 Unsecured Jar. 19, 2024 46 Jan. 19, 2017 —	33	Feb. 24, 2011	20,000	20,000	1.422	Unsecured	Feb. 19, 2021
36 May 30, 2013 20,000 ** 20,000 0.717 Unsecured May 18, 2018 37 Jul. 25, 2013 20,000 20,000 1.035 Unsecured Jul. 20, 2021 38 Dec. 16, 2013 20,000 20,000 0.978 Unsecured Dec. 20, 2023 39 Feb. 24, 2014 20,000 20,000 0.929 Unsecured Feb. 20, 2024 40 Jun. 11, 2014 20,000 20,000 0.889 Unsecured Jun. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2024 42 Apr. 18, 2016 10,000 10,000 0.310 Unsecured Aug. 20, 2026 43 Jun. 7, 2016 20,000 20,000 0.290 Unsecured Jun. 19, 2026 44 Oct. 20, 2016 10,000 10,000 0.888 Unsecured Nov. 20, 2026 45 Nov. 29, 2016 10,000 20,000 0.220 Unsecured Apr. 20, 2032 46 Jan. 19, 2017<	34	Sep. 14, 2012	20,000	—	0.592	Unsecured	Sep. 20, 2017
37 Jul. 25, 2013 20,000 20,000 1.035 Unsecured Jul. 20, 2021 38 Dec. 16, 2013 20,000 20,000 0.978 Unsecured Dec. 20, 2023 39 Feb. 24, 2014 20,000 20,000 0.929 Unsecured Feb. 20, 2024 40 Jun. 11, 2014 20,000 20,000 0.889 Unsecured Jun. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2024 42 Apr. 18, 2016 10,000 10,000 0.310 Unsecured Aug. 20, 2026 43 Jun. 7, 2016 20,000 20,000 0.290 Unsecured Apr. 20, 2026 44 Oct. 20, 2016 10,000 10,000 0.260 Unsecured Nov. 20, 2036 45 Nov. 29, 2016 10,000 10,000 0.260 Unsecured Nov. 20, 2026 46 Jan. 19, 2017 20,000 20,000 0.220 Unsecured Apr. 10, 2024 47 Feb. 22, 2017 10,000 10,000 0.919 Unsecured Apr. 20, 2032	35	Oct. 22, 2012	20,000	20,000	1.126	Unsecured	Oct. 20, 2022
38 Dec. 16, 2013 20,000 20,000 0.978 Unsecured Dec. 20, 2023 39 Feb. 24, 2014 20,000 20,000 0.929 Unsecured Feb. 20, 2024 40 Jun. 11, 2014 20,000 20,000 0.889 Unsecured Jun. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2024 42 Apr. 18, 2016 10,000 10,000 0.310 Unsecured Apr. 20, 2026 43 Jun. 7, 2016 20,000 20,000 0.290 Unsecured Apr. 20, 2026 44 Oct. 20, 2016 10,000 10,000 0.688 Unsecured Jun. 19, 2026 45 Nov. 29, 2016 10,000 10,000 0.260 Unsecured Nov. 20, 2026 46 Jan. 19, 2017 20,000 20,000 0.220 Unsecured Feb. 20, 2037 47 Feb. 22, 2017 10,000 10,000 0.569 Unsecured Feb. 20, 2037 49 May. 18, 2017 </td <td>36</td> <td>May 30, 2013</td> <td>20,000</td> <td>*1 20,000</td> <td>0.717</td> <td>Unsecured</td> <td>May 18, 2018</td>	36	May 30, 2013	20,000	*1 20,000	0.717	Unsecured	May 18, 2018
39 Feb. 24, 2014 20,000 20,000 0.929 Unsecured Feb. 20, 2024 40 Jun. 11, 2014 20,000 20,000 0.889 Unsecured Jun. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2024 42 Apr. 18, 2016 10,000 10,000 0.310 Unsecured Apr. 20, 2026 43 Jun. 7, 2016 20,000 20,000 0.290 Unsecured Jun. 19, 2026 44 Oct. 20, 2016 10,000 10,000 0.688 Unsecured Oct. 20, 2026 44 Jun. 19, 2017 20,000 20,000 0.280 Unsecured Nov. 20, 2026 46 Jan. 19, 2017 20,000 20,000 0.220 Unsecured Nov. 20, 2037 48 Apr. 13, 2017 — 10,000 0.569 Unsecured Apr. 20, 2032 49 May. 18, 2017 — 10,000 0.415 Unsecured Jul. 20, 2027 50 Jul. 19, 2017	37	Jul. 25, 2013	20,000	20,000	1.035	Unsecured	Jul. 20, 2021
40 Jun. 11, 2014 20,000 20,000 0.889 Unsecured Jun. 20, 2024 41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2024 42 Apr. 18, 2016 10,000 10,000 0.310 Unsecured Apr. 20, 2026 43 Jun. 7, 2016 20,000 20,000 0.290 Unsecured Jun. 19, 2026 44 Oct. 20, 2016 10,000 10,000 0.688 Unsecured Oct. 20, 2036 45 Nov. 29, 2016 10,000 10,000 0.260 Unsecured Nov. 20, 2026 44 Get. 20, 2017 20,000 20,000 0.220 Unsecured Nov. 20, 2026 45 Nov. 29, 2017 10,000 10,000 0.919 Unsecured Jan. 19, 2024 47 Feb. 22, 2017 10,000 10,000 0.919 Unsecured Apr. 20, 2037 48 Apr. 13, 2017 — 10,000 0.400 Unsecured May. 20, 2027 50 Jul. 19, 2017	38	Dec. 16, 2013	20,000	20,000	0.978	Unsecured	Dec. 20, 2023
41 Sep. 2, 2014 20,000 20,000 0.782 Unsecured Aug. 20, 2024 42 Apr. 18, 2016 10,000 10,000 0.310 Unsecured Apr. 20, 2026 43 Jun. 7, 2016 20,000 20,000 0.290 Unsecured Jun. 19, 2026 44 Oct. 20, 2016 10,000 10,000 0.688 Unsecured Oct. 20, 2036 45 Nov. 29, 2016 10,000 10,000 0.260 Unsecured Nov. 20, 2026 46 Jan. 19, 2017 20,000 20,000 0.220 Unsecured Jan. 19, 2024 47 Feb. 22, 2017 10,000 10,000 0.919 Unsecured Jan. 19, 2024 48 Apr. 13, 2017 — 10,000 0.569 Unsecured Apr. 20, 2037 49 May. 18, 2017 — 10,000 0.415 Unsecured May. 20, 2027 50 Jul. 19, 2017 — 10,000 0.415 Unsecured Jul. 20, 2027 51 Jul. 19, 2017 <td< td=""><td>39</td><td>Feb. 24, 2014</td><td>20,000</td><td>20,000</td><td>0.929</td><td>Unsecured</td><td>Feb. 20, 2024</td></td<>	39	Feb. 24, 2014	20,000	20,000	0.929	Unsecured	Feb. 20, 2024
42 Apr. 18, 2016 10,000 10,000 0.310 Unsecured Apr. 20, 2026 43 Jun. 7, 2016 20,000 20,000 0.290 Unsecured Jun. 19, 2026 44 Oct. 20, 2016 10,000 10,000 0.688 Unsecured Oct. 20, 2036 45 Nov. 29, 2016 10,000 10,000 0.260 Unsecured Nov. 20, 2026 46 Jan. 19, 2017 20,000 20,000 0.220 Unsecured Jan. 19, 2024 47 Feb. 22, 2017 10,000 10,000 0.919 Unsecured Feb. 20, 2037 48 Apr. 13, 2017 — 10,000 0.569 Unsecured Apr. 20, 2022 49 May. 18, 2017 — 20,000 0.400 Unsecured Apr. 20, 2027 50 Jul. 19, 2017 — 10,000 0.415 Unsecured Jul. 20, 2027 51 Jul. 19, 2017 — 10,000 0.858 Unsecured Sep. 18, 2037 52 Sep. 12, 2017 — </td <td>40</td> <td>Jun. 11, 2014</td> <td>20,000</td> <td>20,000</td> <td>0.889</td> <td>Unsecured</td> <td>Jun. 20, 2024</td>	40	Jun. 11, 2014	20,000	20,000	0.889	Unsecured	Jun. 20, 2024
43 Jun. 7, 2016 20,000 20,000 0.290 Unsecured Jun. 19, 2026 44 Oct. 20, 2016 10,000 10,000 0.688 Unsecured Oct. 20, 2036 45 Nov. 29, 2016 10,000 10,000 0.260 Unsecured Nov. 20, 2026 46 Jan. 19, 2017 20,000 20,000 0.220 Unsecured Jan. 19, 2024 47 Feb. 22, 2017 10,000 10,000 0.919 Unsecured Feb. 20, 2037 48 Apr. 13, 2017 — 10,000 0.569 Unsecured Apr. 20, 2032 49 May. 18, 2017 — 20,000 0.400 Unsecured May. 20, 2027 50 Jul. 19, 2017 — 10,000 0.858 Unsecured Jul. 20, 2027 51 Jul. 19, 2017 — 10,000 0.748 Unsecured Sep. 18, 2037 52 Sep. 12, 2017 — 10,000 0.380 Unsecured Sep. 18, 2037 53 Oct. 13, 2017 —	41	Sep. 2, 2014	20,000	20,000	0.782	Unsecured	Aug. 20, 2024
44 Oct. 20, 2016 10,000 10,000 0.688 Unsecured Oct. 20, 2036 45 Nov. 29, 2016 10,000 10,000 0.260 Unsecured Nov. 20, 2026 46 Jan. 19, 2017 20,000 20,000 0.220 Unsecured Jan. 19, 2024 47 Feb. 22, 2017 10,000 10,000 0.919 Unsecured Feb. 20, 2037 48 Apr. 13, 2017 — 10,000 0.569 Unsecured Apr. 20, 2032 49 May. 18, 2017 — 20,000 0.400 Unsecured May. 20, 2027 50 Jul. 19, 2017 — 10,000 0.415 Unsecured Jul. 20, 2027 51 Jul. 19, 2017 — 10,000 0.858 Unsecured Jul. 17, 2037 52 Sep. 12, 2017 — 10,000 0.748 Unsecured Sep. 18, 2037 53 Oct. 13, 2017 — 10,000 0.380 Unsecured Sep. 18, 2037 54 Nov. 15, 2017 —	42	Apr. 18, 2016	10,000	10,000	0.310	Unsecured	Apr. 20, 2026
45 Nov. 29, 2016 10,000 10,000 0.260 Unsecured Nov. 20, 2026 46 Jan. 19, 2017 20,000 20,000 0.220 Unsecured Jan. 19, 2024 47 Feb. 22, 2017 10,000 10,000 0.919 Unsecured Feb. 20, 2037 48 Apr. 13, 2017 — 10,000 0.569 Unsecured Apr. 20, 2032 49 May. 18, 2017 — 20,000 0.400 Unsecured May. 20, 2027 50 Jul. 19, 2017 — 10,000 0.858 Unsecured Jul. 20, 2027 51 Jul. 19, 2017 — 10,000 0.415 Unsecured Jul. 20, 2027 52 Sep. 12, 2017 — 10,000 0.858 Unsecured Jul. 17, 2037 52 Sep. 12, 2017 — 10,000 0.748 Unsecured Sep. 18, 2037 53 Oct. 13, 2017 — 10,000 0.380 Unsecured Nov. 19, 2027 54 Nov. 15, 2017 — <t< td=""><td>43</td><td></td><td>20,000</td><td>20,000</td><td>0.290</td><td>Unsecured</td><td>Jun. 19, 2026</td></t<>	43		20,000	20,000	0.290	Unsecured	Jun. 19, 2026
46 Jan. 19, 2017 20,000 20,000 0.220 Unsecured Jan. 19, 2024 47 Feb. 22, 2017 10,000 10,000 0.919 Unsecured Feb. 20, 2037 48 Apr. 13, 2017 — 10,000 0.569 Unsecured Apr. 20, 2032 49 May. 18, 2017 — 20,000 0.400 Unsecured May. 20, 2027 50 Jul. 19, 2017 — 10,000 0.415 Unsecured Jul. 20, 2027 51 Jul. 19, 2017 — 10,000 0.4858 Unsecured Jul. 20, 2037 52 Sep. 12, 2017 — 10,000 0.748 Unsecured Sep. 18, 2037 53 Oct. 13, 2017 — 10,000 0.380 Unsecured Oct. 20, 2027 54 Nov. 15, 2017 — 30,000 0.380 Unsecured Nov. 19, 2027	44	Oct. 20, 2016	10,000	10,000	0.688	Unsecured	Oct. 20, 2036
47 Feb. 22, 2017 10,000 10,000 0.919 Unsecured Feb. 20, 2037 48 Apr. 13, 2017 — 10,000 0.569 Unsecured Apr. 20, 2032 49 May. 18, 2017 — 20,000 0.400 Unsecured May. 20, 2027 50 Jul. 19, 2017 — 10,000 0.415 Unsecured Jul. 20, 2027 51 Jul. 19, 2017 — 10,000 0.858 Unsecured Jul. 17, 2037 52 Sep. 12, 2017 — 10,000 0.748 Unsecured Sep. 18, 2037 53 Oct. 13, 2017 — 10,000 0.380 Unsecured Sep. 18, 2037 54 Nov. 15, 2017 — 30,000 0.380 Unsecured Nov. 19, 2027	45	Nov. 29, 2016	10,000	10,000	0.260	Unsecured	Nov. 20, 2026
48 Apr. 13, 2017 10,000 0.569 Unsecured Apr. 20, 2032 49 May. 18, 2017 20,000 0.400 Unsecured May. 20, 2027 50 Jul. 19, 2017 10,000 0.415 Unsecured Jul. 20, 2027 51 Jul. 19, 2017 10,000 0.858 Unsecured Jul. 17, 2037 52 Sep. 12, 2017 10,000 0.748 Unsecured Sep. 18, 2037 53 Oct. 13, 2017 10,000 0.380 Unsecured Oct. 20, 2027 54 Nov. 15, 2017 30,000 0.380 Unsecured Nov. 19, 2027	46	Jan. 19, 2017	20,000	20,000	0.220	Unsecured	Jan. 19, 2024
49 May. 18, 2017 20,000 0.400 Unsecured May. 20, 2027 50 Jul. 19, 2017 10,000 0.415 Unsecured Jul. 20, 2027 51 Jul. 19, 2017 10,000 0.858 Unsecured Jul. 17, 2037 52 Sep. 12, 2017 10,000 0.748 Unsecured Sep. 18, 2037 53 Oct. 13, 2017 10,000 0.380 Unsecured Oct. 20, 2027 54 Nov. 15, 2017 30,000 0.380 Unsecured Nov. 19, 2027	47	Feb. 22, 2017	10,000	10,000	0.919	Unsecured	Feb. 20, 2037
50 Jul. 19, 2017 — 10,000 0.415 Unsecured Jul. 20, 2027 51 Jul. 19, 2017 — 10,000 0.858 Unsecured Jul. 17, 2037 52 Sep. 12, 2017 — 10,000 0.748 Unsecured Sep. 18, 2037 53 Oct. 13, 2017 — 10,000 0.380 Unsecured Oct. 20, 2027 54 Nov. 15, 2017 — 30,000 0.380 Unsecured Nov. 19, 2027	48	Apr. 13, 2017	_	10,000		Unsecured	
51 Jul. 19, 2017 — 10,000 0.858 Unsecured Jul. 17, 2037 52 Sep. 12, 2017 — 10,000 0.748 Unsecured Sep. 18, 2037 53 Oct. 13, 2017 — 10,000 0.380 Unsecured Oct. 20, 2027 54 Nov. 15, 2017 — 30,000 0.380 Unsecured Nov. 19, 2027	49	May. 18, 2017	_	20,000	0.400	Unsecured	May. 20, 2027
52 Sep. 12, 2017 10,000 0.748 Unsecured Sep. 18, 2037 53 Oct. 13, 2017 10,000 0.380 Unsecured Oct. 20, 2027 54 Nov. 15, 2017 30,000 0.380 Unsecured Nov. 19, 2027	50	Jul. 19, 2017		,		Unsecured	
53 Oct. 13, 2017 — 10,000 0.380 Unsecured Oct. 20, 2027 54 Nov. 15, 2017 — 30,000 0.380 Unsecured Nov. 19, 2027		Jul. 19, 2017	_				
54 Nov. 15, 2017 — 30,000 0.380 Unsecured Nov. 19, 2027			—			Unsecured	
	53	Oct. 13, 2017	_			Unsecured	Oct. 20, 2027
Total ¥655,086 ¥594,991 — — —	54	Nov. 15, 2017		;	0.380	Unsecured	Nov. 19, 2027
	Total		¥655,086	¥594,991			

(Notes)
 1. The balances as of March 31, 2018 regarding bonds No. 25 and 36 are redeemable within one year.
 2. The amounts redeemable within five years after March 31, 2018 are as follows:

	Millions of yen
Due in one year or less	¥40,000
Due after one year through two years	60,000
Due after two years through three years	80,000
Due after three years through four years	20,000
Due after four years through five years	¥20,000

Schedule of Loans, etc.

	Balance as of	Balance as of		
	Apr. 1, 2017	Mar. 31, 2018	Average rate of interest	
	Millions of yen	Millions of yen	%	Repayment date
Long-term loans (excluding current portion)	¥891,200	¥875,043	1.451	From Apr. 1, 2019 To Mar. 31, 2037
Lease obligations (excluding current portion)	353	368	—	From Apr. 2, 2019 To Jul. 26, 2024
Current portion of long-term loans	48,194	73,892	1.113	—
Current portion of lease obligations	290	260	_	—
Short-term loans	24,957	16,803	0.171	
Total	¥964,996	¥966,369	_	—

(Notes) 1. Average rate of interest is the weighted average rate of interest for loans as of March 31, 2018.
 2. Average rate of interest for "Lease obligations (excluding current portion)" and "Current portion of lease obligations" is not presented as the amounts of lease obligations on the consolidated balance sheets include the interest portion.
 3. Scheduled redemption amount of repayment of "Long-term loans (excluding current portion)" and "Lease obligations (excluding current portion)" within five years after March 31, 2018 are as follows:

Milli

		IVIIIIONS OF yer
	Long-term loans	Lease obligations
Due after one year through two years	¥99,099	¥187
Due after two years through three years	79,936	100
Due after three years through four years	45,482	56
Due after four years through five years	¥83,635	¥22

Schedule of Asset Retirement Obligations

				Millions of yen
	Balance as of			Balance as of
	April 1, 2017	Increase	Decrease	March 31, 2018
Restoration obligations due to real estate lease agreement	¥3,230	¥11,980	¥(22)	¥15,188
Restoration obligation due to the electric power sales				
contract in overseas business	5,403	637	_	6,041
Other	¥3,930	¥5,014	¥(1,348)	¥7,596

Building a better working world

Ernst & Young ShinNihon LLC Hibiya Kokusai Bldg. 2-2-3 Uchisaiwai-cho, Chiyoda-ku Tokyo, Japan 100-0011 Tel: +81 3 3503 1100 Fax: +81 3 3503 1197 www.shinnihon.or.jp

Independent Auditor's Report

The Board of Directors Electric Power Development Co., Ltd.

We have audited the accompanying consolidated financial statements of Electric Power Development Co., Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at March 31, 2018, and the consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity's preparation and fair presentation of the consolidated financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Electric Power Development Co., Ltd. and its consolidated subsidiaries as at March 31, 2018, and their consolidated financial performance and cash flows for the year then ended in conformity with accounting principles generally accepted in Japan.

Emster Young Shin Nihon_

June 28, 2018 Tokyo, Japan





Electric Power Development Co., Ltd. Corporate Planning & Administration Department Corporate Planning Office 15-1, Ginza 6-chome, Chuo-ku, Tokyo 104-8165, JAPAN TEL: +81-3-3546-2211 E-Mail: investors@jpower.co.jp http://www.jpower.co.jp/english/