

# Summary of FY2015 Earnings Results



Electric Power Development Co., Ltd.

April 28, 2016

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The following contains statements that constitute forward-looking statements, plans for the future, management targets, etc. relating to the Company and/or the J-POWER group. These are based on current assumptions of future events, and there exist possibilities that such assumptions are objectively incorrect and actual results may differ from those in the statements as a result of various factors.

Furthermore, information and data other than those concerning the Company and its subsidiaries/affiliates are quoted from public information, and the Company has not verified and will not warrant its accuracy or dependency.

## Display of Figures

- ✓ All figures are consolidated unless stated otherwise.
- ✓ Amounts less than 100 million yen and electric power sales volume less than 100 million kWh shown in the consolidated financial data have been rounded down. Consequently, the sum of the individual amounts may not necessarily agree with figures shown in total columns.

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# I. Summary of FY2015 Earnings Results

# Summary of FY2015 Earnings Results



(Unit: billion yen)

Consolidated	FY2014 (Apr.-Mar.)	FY2015 (Apr.-Mar.)	Year-on-year change		FY2015 Forecast*1 (Apr.-Mar.)	Comparison with the forecast*1	
Operating Revenue	750.6	780.0	29.4	3.9 %	792.0	(11.9)	(1.5) %
Operating Income	72.8	87.3	14.5	19.9 %	83.0	4.3	5.3 %
Ordinary Income	59.3	58.0	(1.3)	(2.2) %	55.0	3.0	5.5 %
Profit attributable to owners of parent	43.2	39.7	(3.4)	(8.1) %	42.0	(2.2)	(5.4) %
Non-consolidated	FY2014 (Apr.-Mar.)	FY2015 (Apr.-Mar.)	Year-on-year change		FY2015 Forecast*1 (Apr.-Mar.)	Comparison with the forecast*1	
Operating Revenue	557.9	552.3	(5.6)	(1.0) %	562.0	(9.6)	(1.7) %
Operating Income	44.5	41.0	(3.5)	(7.9) %	40.0	1.0	2.6 %
Ordinary Income	28.9	39.6	10.7	37.1 %	38.0	1.6	4.4 %
Profit	22.4	30.4	8.0	35.7 %	31.0	(0.5)	(1.7) %
Growth indicator	FY2014 (Apr.-Mar.)	FY2015 (Apr.-Mar.)	Year-on-year change				
J-POWER EBITDA*2	181.8	193.3	11.5	6.4 %			

\*1 Revised earnings forecast released on October 30, 2015.

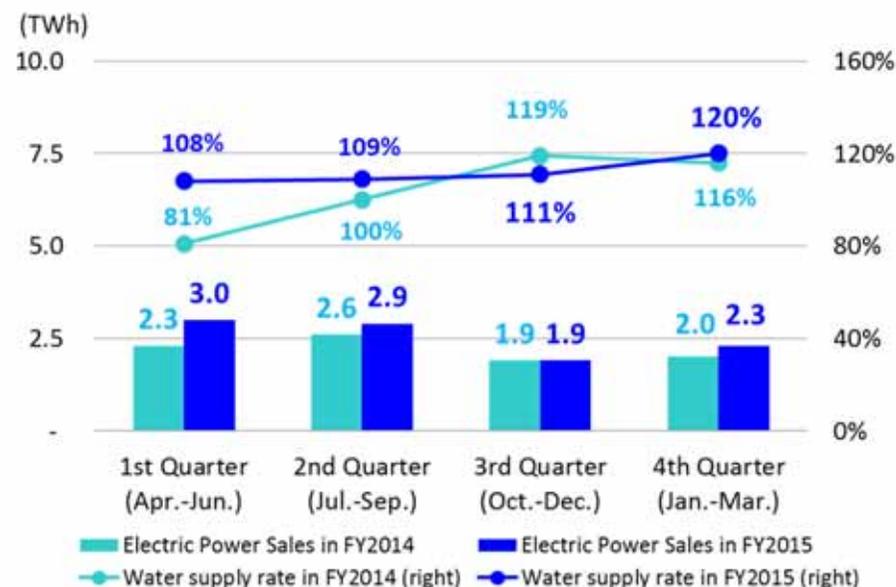
\*2 J-POWER EBITDA = Operating income + Depreciation and amortization + Equity in earnings of affiliates

# Key Data (Electric Power Sales)

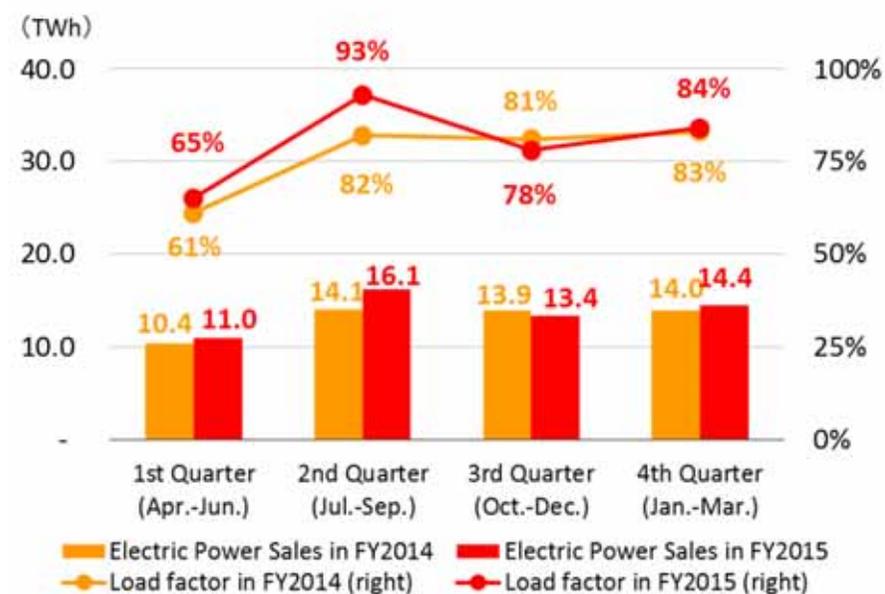


## Electric Power Sales for each Quarter

### [Hydroelectric (Wholesale Electric Power)]



### [Thermal (Wholesale Electric Power)]



	FY2014 (Apr.-Mar.)	FY2015 (Apr.-Mar.)	Year-on-year change	
Electric Power Sales (TWh)				
Electric Power Business	64.0	67.3	3.2	5.1%
Hydroelectric (Wholesale Electric Power)	9.0	10.3	1.2	14.3%
Thermal (Wholesale Electric Power)	52.5	55.0	2.4	4.6%
Other Electric Power Business	2.4	1.9	(0.4)	(18.7)%
Overseas Business*	8.6	13.8	5.2	60.1%
Water supply rate (Wholesale Electric Power)	98%	111%	13points	
Load factor (Wholesale Electric Power)	76%	80%	4points	

\* Electric power sales volume of overseas consolidated subsidiaries (Electric power sales volume of equity method affiliated companies is not included.)

# Key Data (Operating Revenue)



	FY2014 (Apr.-Mar.)	FY2015 (Apr.-Mar.)	Year-on-year change	
Operating Revenue (Billion yen)	750.6	780.0	29.4	3.9%
Electric Power Business	588.1	570.8	(17.3)	(2.9)%
Hydroelectric (Wholesale Electric Power)	105.7	109.0	3.3	3.1%
Thermal (Wholesale Electric Power)	389.1	380.3	(8.8)	(2.3)%
Other Electric Power Business	41.7	30.2	(11.4)	(27.4)%
Overseas Business <sup>*1</sup>	108.9	155.9	47.0	43.2%
Other Business <sup>*2</sup>	53.5	53.2	(0.2)	(0.5)%
Average foreign exchange rate (Yen/US\$)	109.76	120.15		
Foreign exchange rate at the end of FY (Yen/THB)	3.67	3.34		
Foreign exchange rate at the end of FY (THB/US\$)	32.96	36.09		

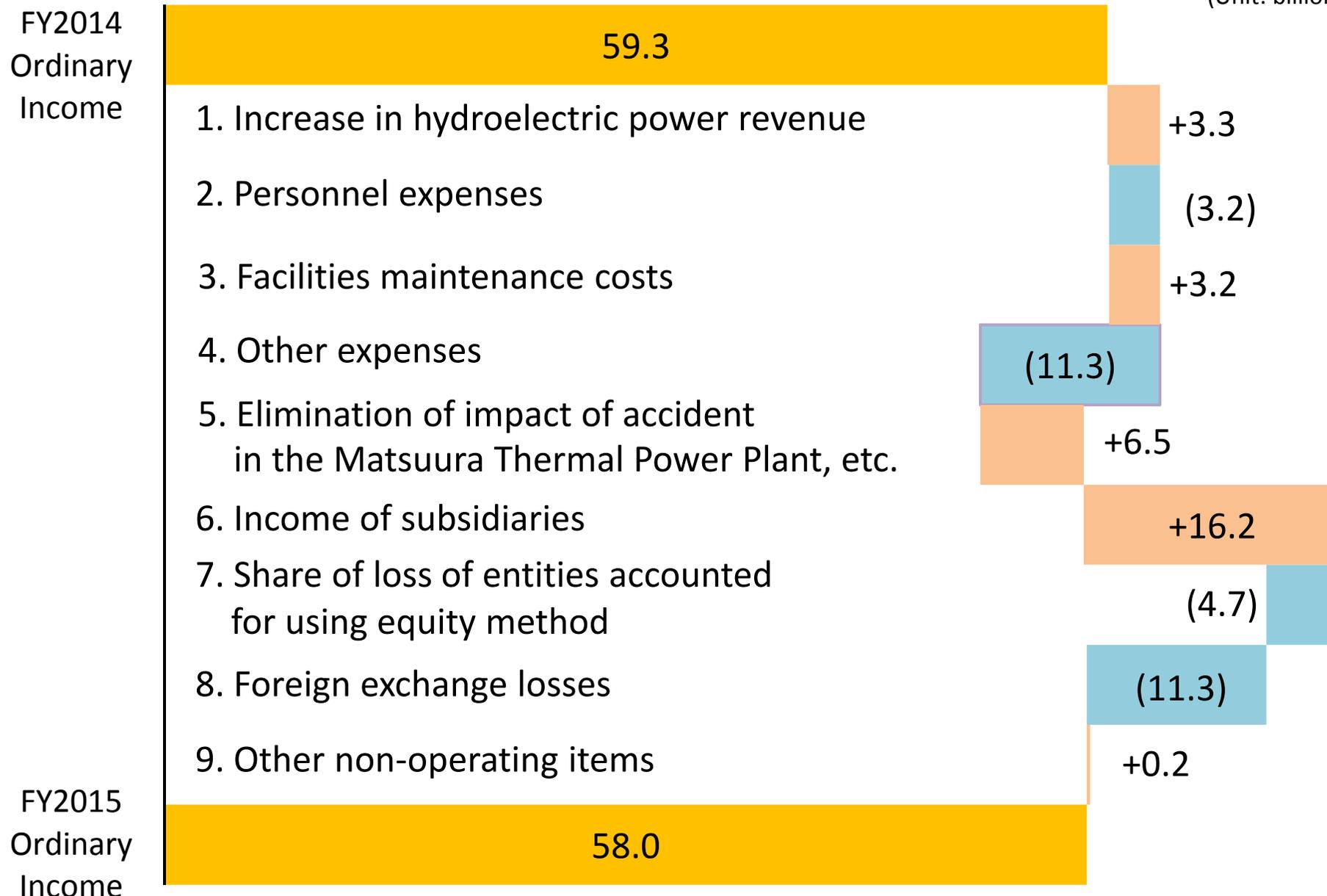
\*1 Sales for the overseas business segment (Sales from overseas consolidated subsidiaries and overseas consulting business, etc.)

\*2 "Other Businesses" is composed of "Electric Power-Related Business" segment and "Other Businesses" segment.

# FY2015 Earnings Results (Main Factors for Change)



(Unit: billion yen)



# Revenue / Expenditure Comparison



(Unit: billion yen)

	FY2014 (Apr.-Mar.)	FY2015 (Apr.-Mar.)	Year-on-year change	Main factors for change
<b>Operating Revenue</b>	<b>750.6</b>	<b>780.0</b>	<b>29.4</b>	
Electric power business	588.1	570.8	(17.3)	Non-consolidated (5.5), Subsidiaries and others (11.7)
Overseas business	108.9	155.9	47.0	Operation of IPP projects in Thailand and others
Other business	53.5	53.2	(0.2)	
<b>Operating Expenses</b>	<b>677.7</b>	<b>692.6</b>	<b>14.9</b>	
<b>Operating Income</b>	<b>72.8</b>	<b>87.3</b>	<b>14.5</b>	Non-consolidated (3.5), Subsidiaries and others +18.0
<b>Non-operating Revenue</b>	<b>22.7</b>	<b>17.8</b>	<b>(4.8)</b>	
Share of loss of entities accounted for using equity method	15.6	10.8	(4.7)	
Other	7.0	6.9	(0.0)	
<b>Non-operating Expenses</b>	<b>36.2</b>	<b>47.2</b>	<b>10.9</b>	
Interest expenses	28.2	30.4	2.2	Operation of IPP projects in Thailand and others
Foreign exchange loss	1.5	12.8	11.3	
Other	6.4	3.8	(2.5)	
<b>Ordinary Income</b>	<b>59.3</b>	<b>58.0</b>	<b>(1.3)</b>	
Extraordinary income	2.1	-	(2.1)	
<b>Profit attributable to owners of parent</b>	<b>43.2</b>	<b>39.7</b>	<b>(3.4)</b>	

# Balance Sheet



(Unit: billion yen)

	FY2014 End of FY	FY2015 End of FY	Change from prior year end	Main factors for change
<b>Noncurrent Assets</b>	<b>2,275.4</b>	<b>2,237.8</b>	<b>(37.6)</b>	
Electric utility plant and equipment	986.5	952.2	(34.3)	Non-consolidated (29.5)
Overseas business facilities	264.8	357.4	92.6	Subsidiaries including power generation projects inThailand +92.6
Other noncurrent assets	115.1	101.8	(13.2)	
Construction in progress	506.9	444.8	(62.1)	Non-consolidated +57.5, Subsidiaries including power generation projects inThailand (119.6)
Nuclear fuel	71.4	73.4	1.9	
Investments and other assets	330.5	308.0	(22.4)	Long-term investment (35.3)
<b>Current Assets</b>	<b>383.6</b>	<b>308.4</b>	<b>(75.2)</b>	
<b>Total Assets</b>	<b>2,659.1</b>	<b>2,546.2</b>	<b>(112.8)</b>	
Interest-bearing debt	1,723.6	1,628.7	(94.8)	Non-consolidated (66.7), Subsidiaries (28.0) [ Long-term loans (31.5), Corporate bonds (60.9) ]
Others	239.1	236.5	(2.6)	
<b>Total Liabilities</b>	<b>1,962.8</b>	<b>1,865.2</b>	<b>(97.5)</b>	
Shareholders' equity	629.4	656.3	26.9	Increase in retained earnings
Accumulated other comprehensive income	59.2	15.7	(43.4)	Foreign currency translation adjustment (22.7), Remeasurements of defined benefit plans(14.8), Valuation difference on available-for-sale securities (7.3)
Non-controlling interests	7.5	8.8	1.2	
<b>Total Net Assets</b>	<b>696.2</b>	<b>680.9</b>	<b>(15.3)</b>	
D/E ratio (x)	2.5	2.4		
Shareholders' equity ratio	25.9%	26.4%		

## II. Summary of FY2016 Earnings Forecast

# Summary of FY2016 Earnings Forecast



(Unit: billion yen)

	Consolidated					Non-consolidated			
	FY2015 Result	FY2016 Forecast	Comparison with FY2015 result			FY2015 Result	FY2016 Forecast	Comparison with FY2015 result	
Operating Revenue	780.0	713.0	(67.0)	(8.6)%	Operating Revenue	552.3	522.0	(30.3)	(5.5)%
Operating Income	87.3	73.0	(14.3)	(16.5)%	Operating Income	41.0	27.0	(14.0)	(34.2)%
Ordinary Income	58.0	53.0	(5.0)	(8.7)%	Ordinary Income	39.6	33.0	(6.6)	(16.8)%
Profit attributable to owners of parent	39.7	37.0	(2.7)	(6.8)%	Profit	30.4	26.0	(4.4)	(14.6)%

Growth indicator	FY2015 Result	FY2016 Forecast	Comparison with FY2015 result	
J-POWER EBITDA	193.3	157.0	(36.3)	(18.8)%

	Cash dividends per share		
	Interim	Year end	Annual
FY2015	35 yen	35 yen	70 yen
FY2016 (Forecast)	35 yen	35 yen	70 yen

# Key Data



	FY2015 Result	FY2016 Forecast	Comparison with FY2015 Result	
<b>Electric Power Sales (TWh)</b>				
<b>Electric Power Business</b>	<b>67.3</b>	<b>63.9</b>	<b>(3.3)</b>	<b>(4.9)%</b>
Hydroelectric Power	10.3	9.3	(0.9)	(9.5)%
Thermal Power	56.2	53.8	(2.4)	(4.3)%
Wind Power	0.7	0.8	0.0	9.4%
<b>Overseas Business*<sup>1</sup></b>	<b>13.8</b>	<b>7.8</b>	<b>(6.0)</b>	<b>(43.3)%</b>
<b>Operating Revenue (Billion yen)</b>	<b>780.0</b>	<b>713.0</b>	<b>(67.0)</b>	<b>(8.6)%</b>
<b>Electric Power Business</b>	<b>570.8</b>	<b>544.0</b>	<b>(26.8)</b>	<b>(4.7)%</b>
Electric Power Generation Business* <sup>2</sup>	519.6	493.0	(26.6)	(5.1)%
Transmission/Transformation Business	48.9	49.0	0.0	0.0%
<b>Overseas Business*<sup>3</sup></b>	<b>155.9</b>	<b>122.0</b>	<b>(33.9)</b>	<b>(21.8)%</b>
<b>Other Business*<sup>4</sup></b>	<b>53.2</b>	<b>46.0</b>	<b>(7.2)</b>	<b>(13.7)%</b>

	FY2015 Result	FY2016 Forecast
Water supply rate	111%	100%
Load factor	80%	77%
Foreign exchange rate at term end		
Yen/US\$	120.61	115
Yen/THB	3.34	3.2
THB/US\$	36.09	36.09
Average foreign exchange rate		
Yen/US\$	120.15	115

\*1 Electric power sales volume of overseas consolidated subsidiaries (Does not include electric power sales volume of affiliated companies accounted for by the equity method)

\*2 The details of Electric Power Business in Operating Revenue before FY 2015 were described as “Hydroelectric (Wholesale Electric Power)”, “Thermal (Wholesale Electric Power)” and “Other Electric Power Business”. From FY 2016, the details are described as “Electric Power Generation Business” (Aggregation of domestic hydroelectric, thermal and wind power) and “Transmission/Transformation Business”.

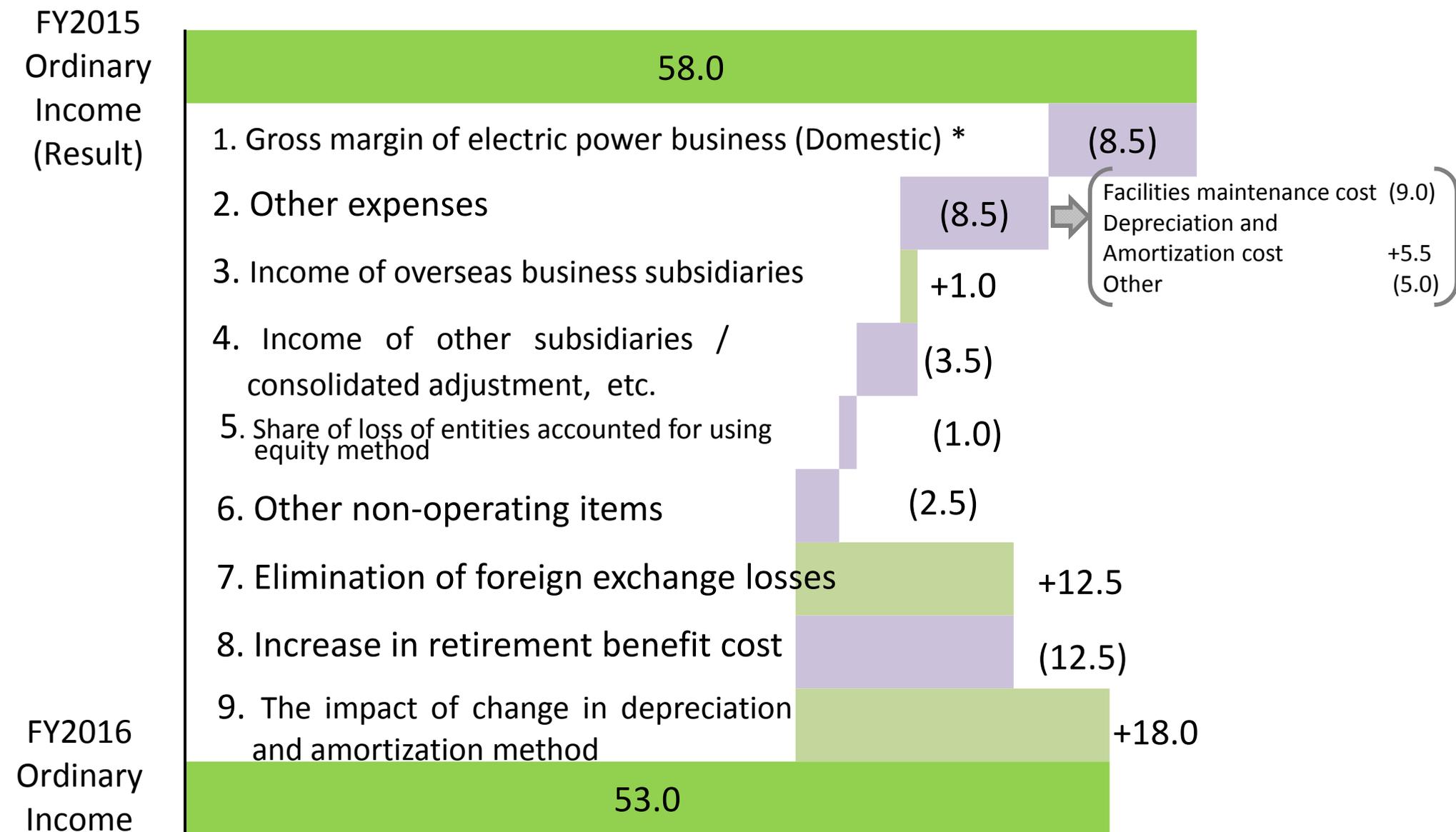
\*3 Sales for the overseas business segment (Sales from overseas consolidated subsidiaries and overseas consulting business, etc.)

\*4 “Other Businesses” is composed of “Electric Power-Related Business” segment and “Other Businesses” segment.

# FY2016 Earnings Forecast (Main Factors for Change)



(Unit: billion yen)

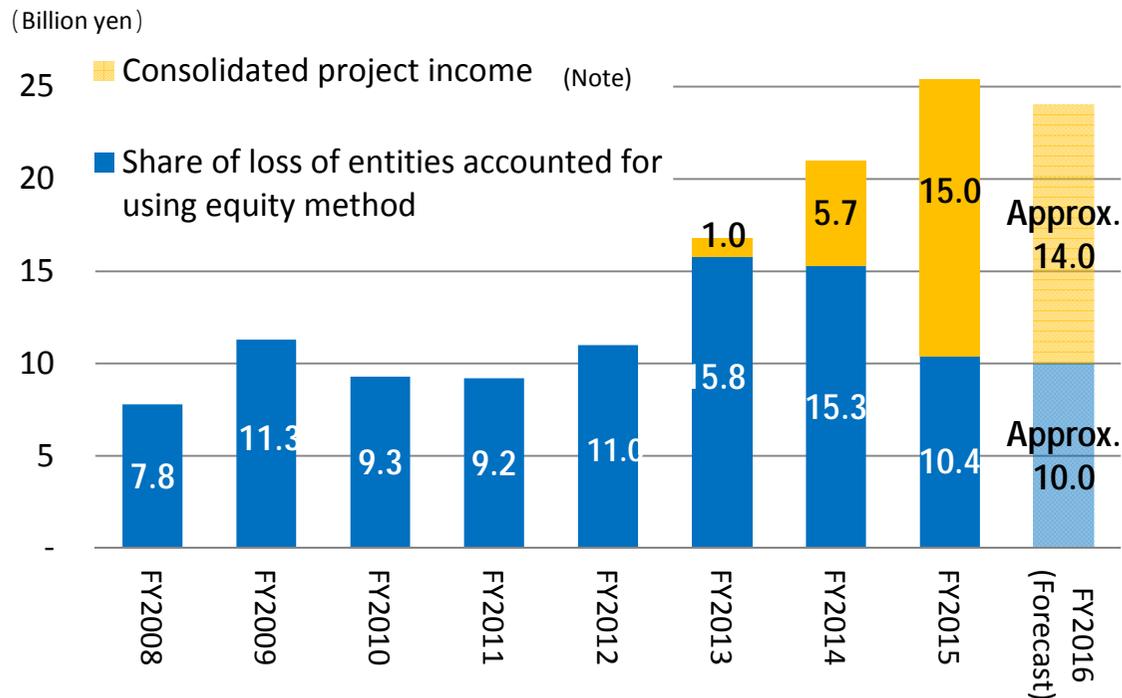


\*Gross margin of electric power business (Domestic) :  
Domestic electric power business revenue (hydro, thermal and wind, excluding transmission) – Fuel costs

# Overseas Power Generation Business: Earnings Contribution Forecast

- ▶ Equity equivalent income\* in FY2015 was 25.4 billion yen.
- ▶ Equity equivalent income\* in FY2016 is expected to be approximately 24.0 billion yen.

## Equity Equivalent Income\* of Overseas Power Generation Business



## Recent Status of Overseas New Projects

- ▶ Thailand
  - All 7SPP, Nong Saeng and U-Thai projects began commercial operation.
- ▶ Indonesia
  - The land acquisition for the project has been completed in March 2016.
  - The deadline for setting up financing under the long-term power purchase agreement was extended to June 2016.

Note: To indicate the actual status of project income on a consolidated basis, foreign exchange gains and losses are deducted. Foreign exchange gains and losses consist primarily of valuation gains and losses on foreign currency-denominated debt.

## Foreign exchange rate (as of December)

	FY2014	FY2015	FY2016(Forecast)
Yen/US\$	120.55	120.61	115
Yen/THB	3.67	3.34	3.2
THB/US\$	32.96	36.09	36.09

\* Equity equivalent income: The total of share of loss of entities accounted for using equity method and consolidated project income. Out of which consolidated project income is the total of income after tax for each consolidated project company in commercial operation multiplied by capital investment ratio of the company. The sum of share of loss of entities accounted for using equity method and consolidated project income do not correspond to segment data.

# . Status of Initiatives for the Medium-Term Management Plan

### ( Initiatives on a low-carbon technologies to support the growth )

- ✓ In the J-POWER group medium-term management plan released last year, there is a growth strategy centered on business expansion in and out of the country as a leading company in coal-fired thermal. Initiatives on low-carbon technologies support this strategy.
- ✓ **The Osaki CoolGen** project is a verification project aimed at commercialization and practical use of **Oxygen-blown IGCC** <sup>\*</sup>, which forms the core of this initiative above. The project is steadily progressing toward commencement of a **demonstration test from March onwards** (Phase 1: Oxygen-blown IGCC).
- ✓ Further, plans for Phase 2 of the demonstration test CO2 capture technology incorporation, planned commencement in FY2019) were approved as appropriate by the Industrial Structure Council, METI and the Council for Science, Technology and Innovation held by the Cabinet Office, and detailed design has commenced as of FY 2016.
- ✓ Other than the above, there are verification initiatives to establish technologies that utilize and manufacture carbon-free energy such as hydrogen from lower grade coal, such as brown coal, as well as commercialization initiatives for biofuel production using microalgae among others.

\* A combined-cycle power generation system using gas turbines and steam turbines using gases generated from coal as fuel. By utilizing oxygen when coal is gasified (oxygen-blow), (in comparison to air-blown IGCC,) the technology may be able to separate and collect CO2 more efficiently, among other strengths.

### (Status of domestic and overseas development projects)

- ✓ The J-POWER group has put forward a growth strategy centered around coal-fired thermal power, and of its specific development projects, the **replacement project for the Takehara Thermal Power Plant** is progressing with construction of the main facility toward operation commencing in 2020. For other coal-fired thermal power projects (the **replacement project for Takasago Thermal Power Plant**, etc.), we are currently progressing with environmental assessment procedures.
- ✓ For the **additional construction of the Sakuma Frequency Converter Station** (300 MW -> 600 MW) which forms a part of the transmission facilities that support a thriving competitive market as well as contributing to stable supply of electric power, J-POWER has been selected as the primary body entrusted with construction works.
- ✓ For expansion of renewable energy introduction, the **Ohma Wind Power Station** and other facilities are scheduled to commence operation within 2016, and in addition, new construction of the **Wasabisawa Geothermal Power Plant** and other new facilities as well as initiatives to **expand output by whole renewal of generators at existing hydroelectric power stations (Akiba No.1 and No.2 power stations)** .
- ✓ Another pillar supporting growth is overseas businesses. In 2015, the U-thai IPP in Thailand commenced operation and with the completion of the string of developments in Thailand (7SPPs and 2 IPPs), **our overseas owned capacity reached approx. 7,500 MW**. Also, **land acquisition for the Central Java project is now complete**, and plans are being formed toward full scale construction commencing in June 2016 and commercial operation commencement in 2020.

# Current Status of Development Pipeline



Project Name	Facility	Capacity	Preparation for construction	Under construction	Start of operation	Remarks
Osaki CoolGen (Verification test for oxygen-blown IGCC)	Thermal	166MW		◇		Start of demonstration test : 2017 (planned)
Takehara Thermal Power Plant Unit New No.1 (coal-fired, replace)	Thermal	600MW		◇		Start of operation : 2020 (planned)
Kashima Power ( coal-fired, new capacity )	Thermal	650MW class	◇			Undergoing environmental assessment
Yamaguchi Ube Power (coal-fired, new capacity)	Thermal	1,200MW class	◇			Undergoing environmental assessment
Takasago Thermal Power Plant Unit New No.1/No.2 (coal-fired, replace)	Thermal	1,200MW	◇			Undergoing environmental assessment
U-Thai IPP (Thailand, gas-fired)	Thermal	1,600MW			◇	Development of 7 SPPs and 2 IPPs in Thailand is completed
Central Java IPP (Indonesia, coal-fired)	Thermal	2,000MW	◇			Land acquisition is completed Start of operation : 2020 (planned)
Minami Ehime Wind Farm (extension )	Wind	6.9MW			◇	Started operation in 2016
Ohma Wind Farm	Wind	19.5MW			◇	Start of operation : 2016 (planned)
Yurihonjo Bayside Wind Farm	Wind	16.1MW			◇	Start of operation : 2017 (planned)
Setana Ohsato Wind Farm	Wind	50MW			◇	Completed environmental assessment
Kuzumaki No.2 Wind Farm (tentative name)	Wind	44.6 MW			◇	Completed environmental assessment
Nikaho No.2 Wind Farm (tentative name)	Wind	41.4MW			◇	Undergoing environmental assessment
Wasabizawa Geothermal Power Plant	Geothermal	42MW			◇	Start of operation : 2019 (planned)
Konokitani Hydroelectric Power Plant	Hydroelectric	199kW			◇	Start of operation : 2016 (planned)
Shinkatsurazawa Hydroelectric Power Plant	Hydroelectric	16.8MW			◇	Start of operation : 2020 (planned)
Ohma Nuclear Power Plant	Nuclear	1,383MW			◇	Review by the NRA
Sakuma Frequency Converter Station(increase of capacity)	Transmission/Transformation	300MW				300MW 600MW

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# APPENDIX

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# (1)-1. Consolidated: Revenues and Expenses



(Unit: 100 million yen)

	FY2011	FY2012	FY2013	FY2014	FY2015
<b>Operating revenue</b>	<b>6,546</b>	<b>6,560</b>	<b>7,068</b>	<b>7,506</b>	<b>7,800</b>
Electric power operating revenue	6,097	6,053	6,090	5,881	5,708
Overseas business operating revenue	20	16	428	1,089	1,559
Other operating revenue	428	490	549	535	532
<b>Operating expenses</b>	<b>6,048</b>	<b>6,014</b>	<b>6,476</b>	<b>6,777</b>	<b>6,926</b>
<b>Operating income</b>	<b>498</b>	<b>545</b>	<b>591</b>	<b>728</b>	<b>873</b>
<b>Non-operating revenue</b>	<b>153</b>	<b>175</b>	<b>223</b>	<b>227</b>	<b>178</b>
Share of loss of entities accounted for using equity method	95	117	163	156	108
Others	57	58	59	70	69
<b>Non-operating expenses</b>	<b>285</b>	<b>273</b>	<b>414</b>	<b>362</b>	<b>472</b>
Interest expenses	220	223	253	282	304
Others	65	49	161	79	167
<b>Ordinary income</b>	<b>366</b>	<b>448</b>	<b>400</b>	<b>593</b>	<b>580</b>
Extraordinary income	-	-	23	21	-
Extraordinary loss	33	-	-	-	-
<b>Profit attributable to owners of parent</b>	<b>161</b>	<b>298</b>	<b>286</b>	<b>432</b>	<b>397</b>

# (1)-2. Non-consolidated: Revenues and Expenses



(Unit: 100 million yen)

	FY2011	FY2012	FY2013	FY2014	FY2015	YOY change
<b>Operating revenue</b>	5,999	5,869	5,828	5,579	5,523	(56)
<b>Electric power business</b>	5,905	5,772	5,729	5,485	5,430	(55)
Hydroelectric	1,084	1,066	1,047	1,057	1,090	33
Thermal	4,244	4,139	4,119	3,896	3,812	(84)
Transmission and others	576	566	562	532	527	(4)
<b>Incidental business</b>	94	97	99	93	93	(0)
<b>Operating expenses</b>	5,576	5,436	5,423	5,133	5,113	(20)
<b>Electric power business</b>	5,490	5,347	5,334	5,049	5,028	(20)
Personnel costs	344	340	298	285	318	32
Amortization of the actuarial difference in retirement benefits	17	5	(30)	(43)	(23)	20
Fuel costs	2,384	2,384	2,502	2,284	2,184	(100)
Repair and maintenance costs	542	564	585	610	583	(26)
Depreciation and amortization costs	1,004	894	815	778	740	(38)
Others	1,213	1,162	1,133	1,090	1,202	111
<b>Incidental business</b>	86	88	89	84	84	0
<b>Operating income</b>	423	433	404	445	410	(35)

# (1)-2. Non-consolidated: Revenues and Expenses



	FY2011	FY2012	FY2013	FY2014	FY2015
Electricity sales (GWh)	64,074	63,366	63,076	61,606	65,332
Hydroelectric	10,318	9,032	8,759	9,028	10,322
Thermal	53,756	54,333	54,316	52,577	55,010
Water supply rate (%)	115	102	99	98	111
Load factor of coal-fired thermal power plants (%)	77	78	79	76	80

## 【 Personnel costs 】

(Unit: 100 million yen)

	FY2011	FY2012	FY2013	FY2014	FY2015
Amortization of the actuarial difference in retirement benefits	17	5	(30)	(43)	(23)
Other personnel costs	326	335	329	329	341
Total	344	340	298	285	318

## (Amortization of the actuarial difference)

(Unit: 100 million yen)

	FY2011	FY2012	FY2013	FY2014	FY2015
Actual difference					
The remainder in the previous year (c)	(10)	8	2	(14)	(20)
Actual difference in the previous year	35	(0)	(47)	(49)	(13)
Subtotal (a)	25	7	(45)	(63)	(33)
Amortization *(b)	17	5	(30)	(43)	(23)
The remainder in the present year (c=a-b)	8	2	(14)	(20)	(10)

\* Actuarial differences are amortized by the declining-balance method over two years from the year following the year in which they occurred.

# (1)-2. Non-consolidated: Revenues and Expenses



	FY2011	FY2012	FY2013	FY2014	FY2015
Fuel costs ( ¥ 100 million)	2,384	2,384	2,502	2,284	2,184
Coal consumption (10 thousand ton)	2,077	2,101	2,105	2,067	2,188
Australian coal FOB price* (US\$)	130	115	95	82	68
Average exchange rate ( ¥ /US\$)	79.08	82.91	100.17	109.76	120.15

\* Reference Price

## 【 Repair expenses 】

(Unit: ¥ 100 million)

	FY2011	FY2012	FY2013	FY2014	FY2015
Hydroelectric	130	113	117	133	121
Thermal	357	404	419	423	409
Transmission	37	31	32	36	34
Others	17	15	15	15	16
Total	542	564	585	610	583

## 【 Depreciation and amortization costs 】

(Unit: 100 million yen)

	FY2011	FY2012	FY2013	FY2014	FY2015
Hydroelectric	234	218	213	209	206
Thermal	567	484	408	379	338
Transmission	160	153	150	143	139
Others	42	39	42	44	55
Total	1,004	894	815	778	740

# (1)-3. Consolidated: Segment Information



(Unit: 100 million yen)

		Electric power	Electric power -related	Overseas	Other	Subtotal	Elimination*	Consolidated
FY2015	Sales	5,724	3,591	1,559	230	11,107	(3,306)	7,800
	Sales to customers	5,708	319	1,559	213	7,800	-	7,800
	Ordinary income	317	144	114	8	584	(4)	580
FY2014	Sales	5,898	3,512	1,089	249	10,749	(3,243)	7,506
	Sales to customers	5,881	304	1,089	230	7,506	-	7,506
	Ordinary income	333	89	159	6	589	3	593
year-on-year change	Sales	(173)	79	470	(19)	357	(62)	294
	Sales to customers	(173)	15	470	(17)	294	-	294
	Ordinary income	(16)	54	(45)	1	(4)	(8)	(13)

## “Electric Power Business”

**Wholesale power business:** J-POWER’s hydroelectric, thermal power and transmission business. The majority of consolidated revenue is derived from this segment.

**Other electric power businesses:** Subsidiaries’ thermal power (IPP, for PPSs) and wind power

## “Electric Power-Related Businesses”

These focus on peripheral businesses essential for the operation of power plants and transmission facilities, such as designing, executing, inspecting and maintaining power facilities and importing and transporting coal. Intra-group transactions account for a large portion of this segment, such as Company’s power plant maintenance, coal transportation activities.

## “Overseas Businesses”

Overseas power generation businesses, overseas engineering and consulting businesses

## “Other Businesses”

Diversified businesses such as telecommunication, environmental and the sale of coal

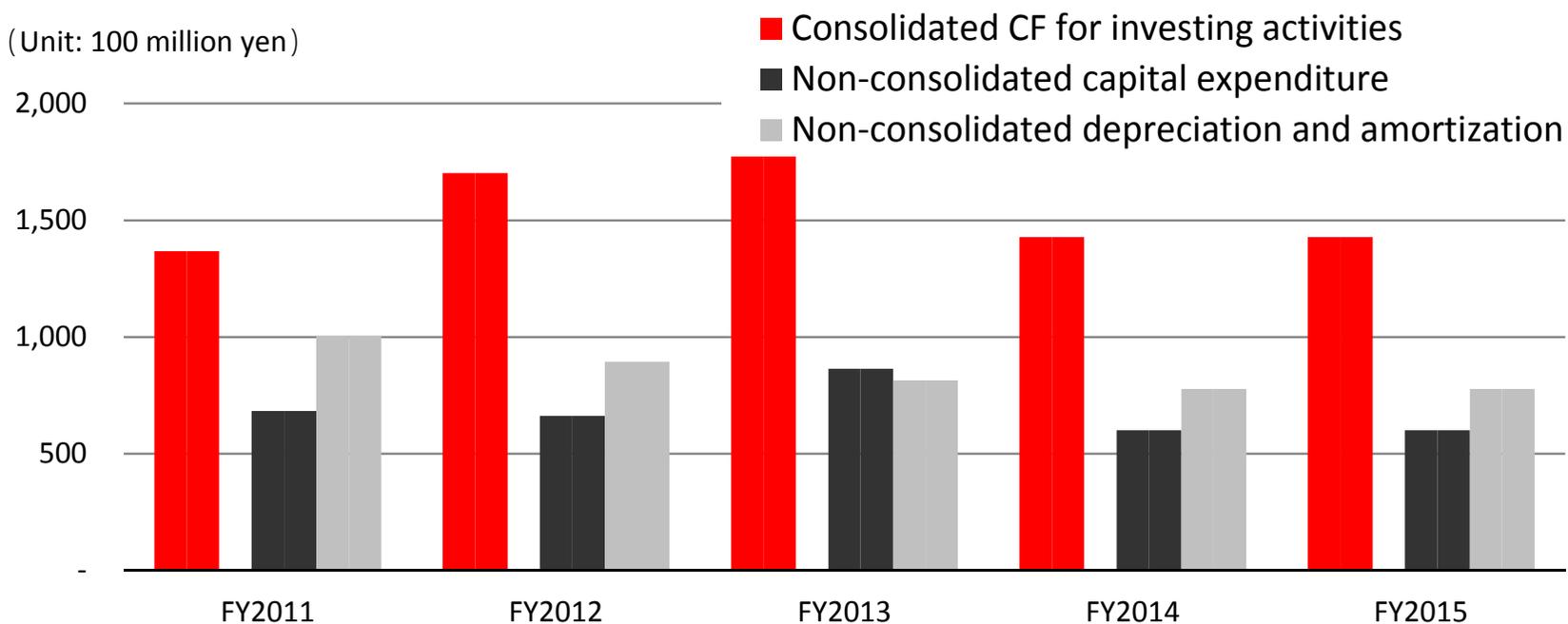
\* Elimination includes elimination of intersegment sales

# (1)-4. Consolidated: Cash Flow

(Unit: 100 million yen)

	FY2011	FY2012	FY2013	FY2014	FY2015
<b>Operating activities</b>	<b>1,258</b>	<b>1,197</b>	<b>1,221</b>	<b>1,478</b>	<b>1,461</b>
Income before income taxes and minority interests	332	451	427	615	579
(reference) Non-consolidated depreciation and amortization	1,004	894	815	778	740
<b>Investing activities</b>	<b>(1,368)</b>	<b>(1,703)</b>	<b>(1,773)</b>	<b>(1,429)</b>	<b>(1,315)</b>
Capital expenditure for subsidiaries	(642)	(1,002)	(957)	(879)	(375)
(reference) Non-consolidated CAPEX*	(684)	(662)	(865)	(611)	(1,063)
<b>Free cash flow</b>	<b>(109)</b>	<b>(505)</b>	<b>(552)</b>	<b>48</b>	<b>145</b>

(Unit: 100 million yen)



\* Non-consolidated capital expenditure: Increase in tangible and intangible noncurrent assets

# (1)-5. Consolidated: Key Ratios and Key Data



(Unit: 100 million yen)

	FY2011	FY2012	FY2013	FY2014	FY2015
<b>(PL)</b> Operating revenue	6,546	6,560	7,068	7,506	7,800
Operating income	498	545	591	728	873
Ordinary income	366	448	400	593	580
Profit attributable to owners of parent	161	298	286	432	397
<b>(BS)</b> Total assets	20,163	21,699	23,852	26,591	25,462
Construction in progress	3,804	4,646	5,126	5,069	4,448
Shareholders' equity	4,073	4,539	5,162	6,887	6,721
Net assets	4,061	4,538	5,194	6,962	6,809
Interest-bearing debts	14,357	15,230	16,499	17,236	16,287
<b>(CF)</b> Investing activities	(1,368)	(1,703)	(1,773)	(1,429)	(1,315)
Free cash flow	(109)	(505)	(552)	48	145
(Ref) Non-consolidated CAPEX*1	(684)	(662)	(865)	(611)	(1,063)
(Ref) Non-consolidated depreciation	1,004	894	815	778	740
ROA (%)	1.8	2.1	1.8	2.4	2.2
ROA (ROA excl. Construction in progress) (%)	2.2	2.7	2.2	2.9	2.7
ROE (%)	3.9	6.9	5.9	7.2	5.8
EPS ( ¥ )	107.39	198.65	191.23	284.43	216.99
BPS ( ¥ )	2,714.94	3,024.98	3,440.23	3,762.52	3,671.91
Shareholders' equity ratio (%)	20.2	20.9	21.6	25.9	26.4
D/E ratio	3.5	3.4	3.2	2.5	2.4
Number of shares issued*2 (thousand)	150,052	150,052	150,051	183,050	183,049

\*1 Non-consolidated capital expenditure: Increase in tangible and intangible noncurrent assets

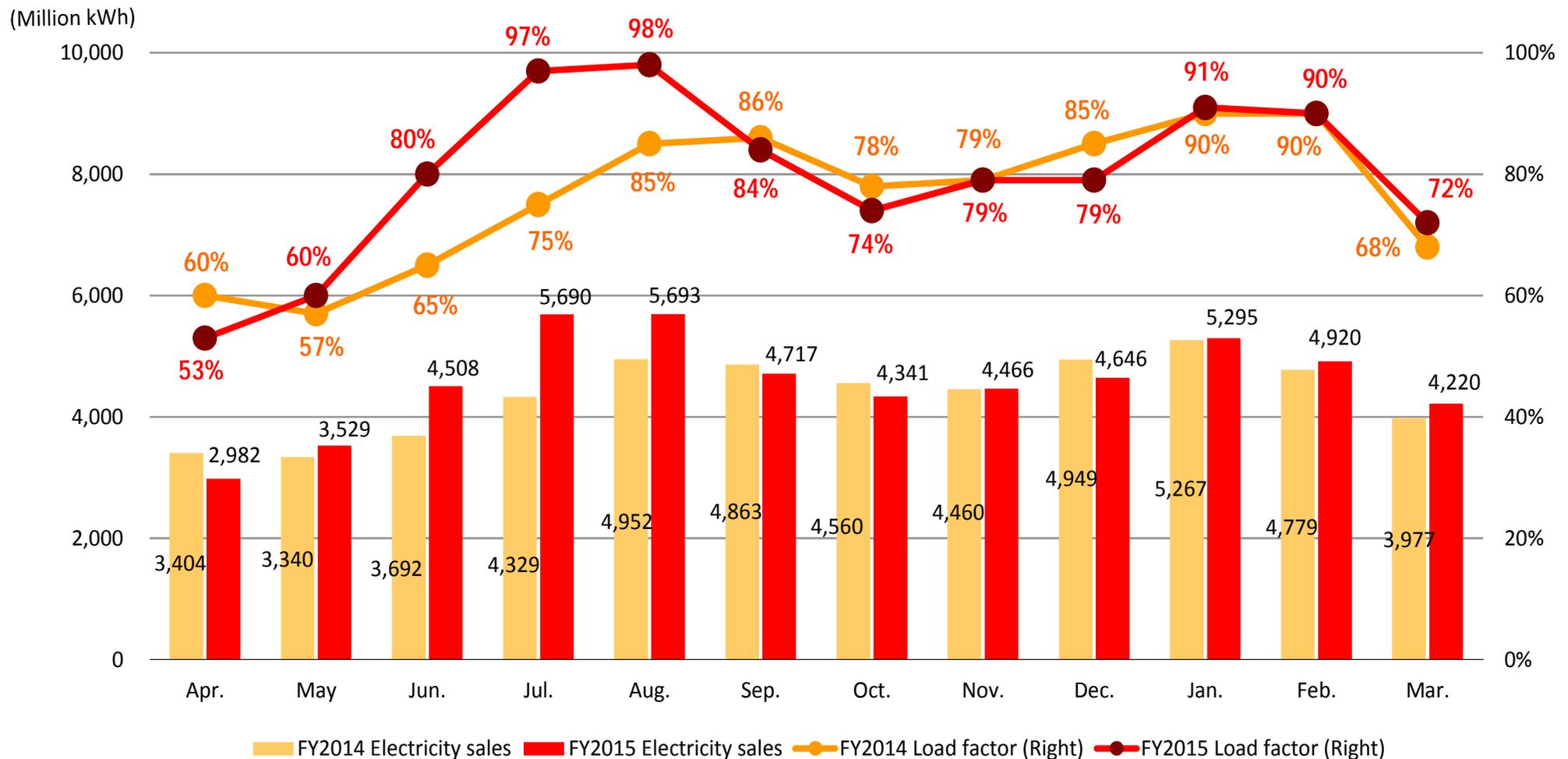
\*2 Number of shares issued at the end of the fiscal year (excluding treasury stock)

# (1) -6. Monthly Electricity Sales:

## Wholesale Electric Power Business (Thermal Power)



▶ Apr. 2014 - Mar. 2015 Results (Cumulative)	▶ Apr. 2015 - Mar. 2016 Results (Cumulative)
Load factor 76%	Load factor 80%
Electricity sales 52.5TWh	Electricity sales 55.0TWh

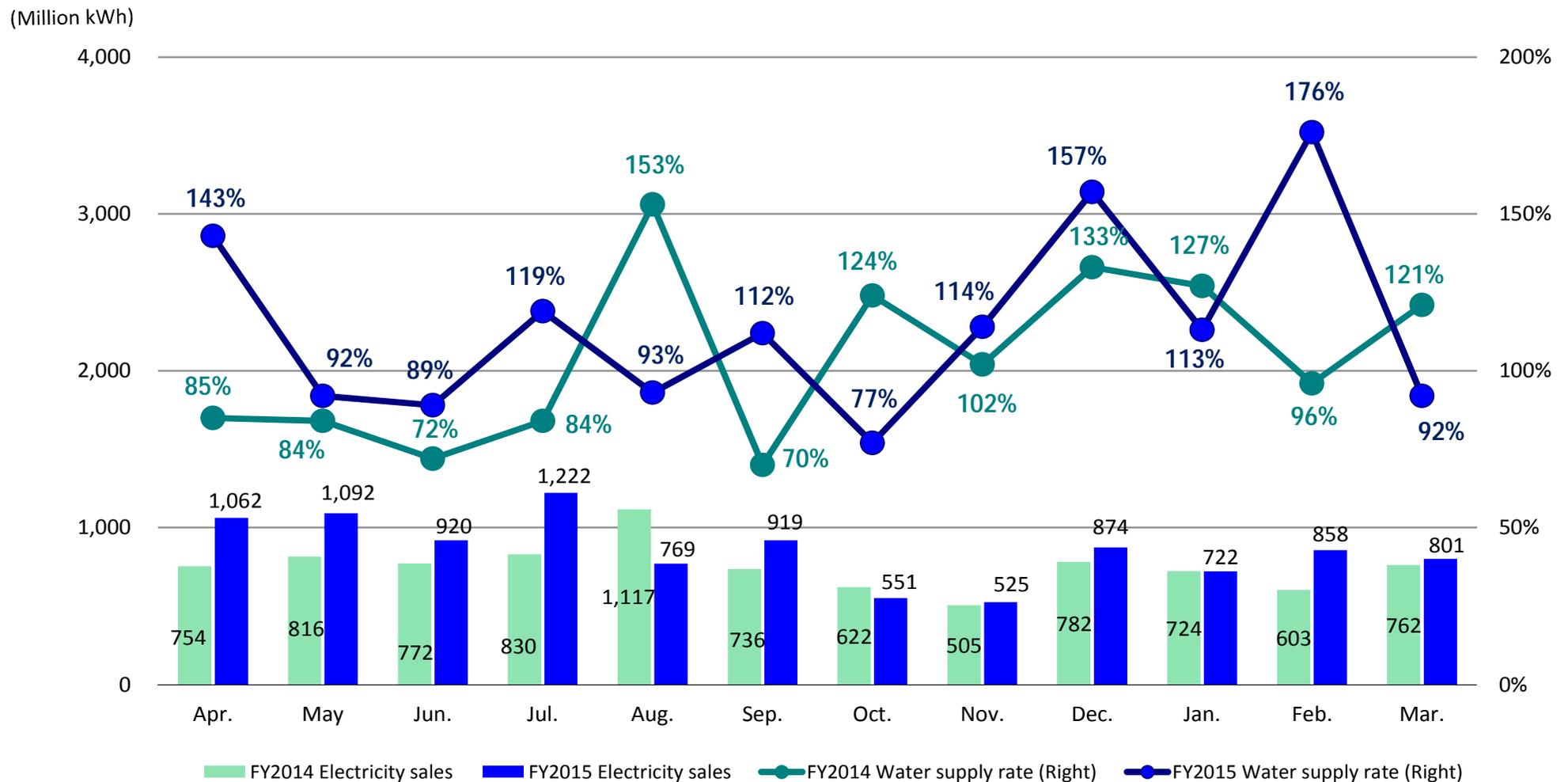


# (1) -6. Monthly Electricity Sales:

## Wholesale Electric Power Business (Hydroelectric Power)

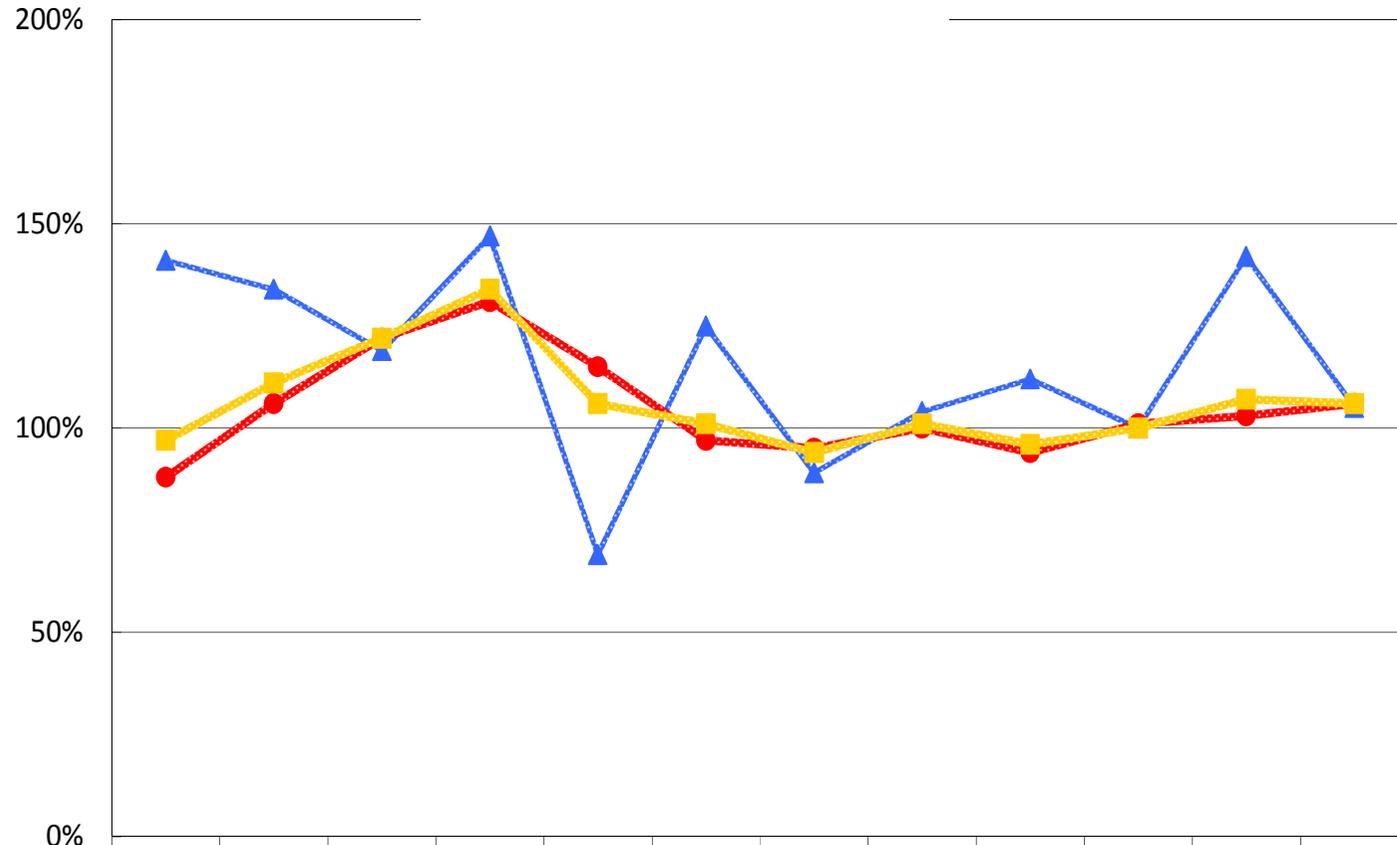


▶ Apr. 2014 - Mar. 2015 Results (Cumulative)	▶ Apr. 2015 - Mar. 2016 Results (Cumulative)
Water supply rate 98%	Water supply rate 111%
Electricity sales 9.0TWh	Electricity sales 10.3TWh



# (1) -6. Monthly Electric Power Business:

## Change in Monthly Electricity Sales



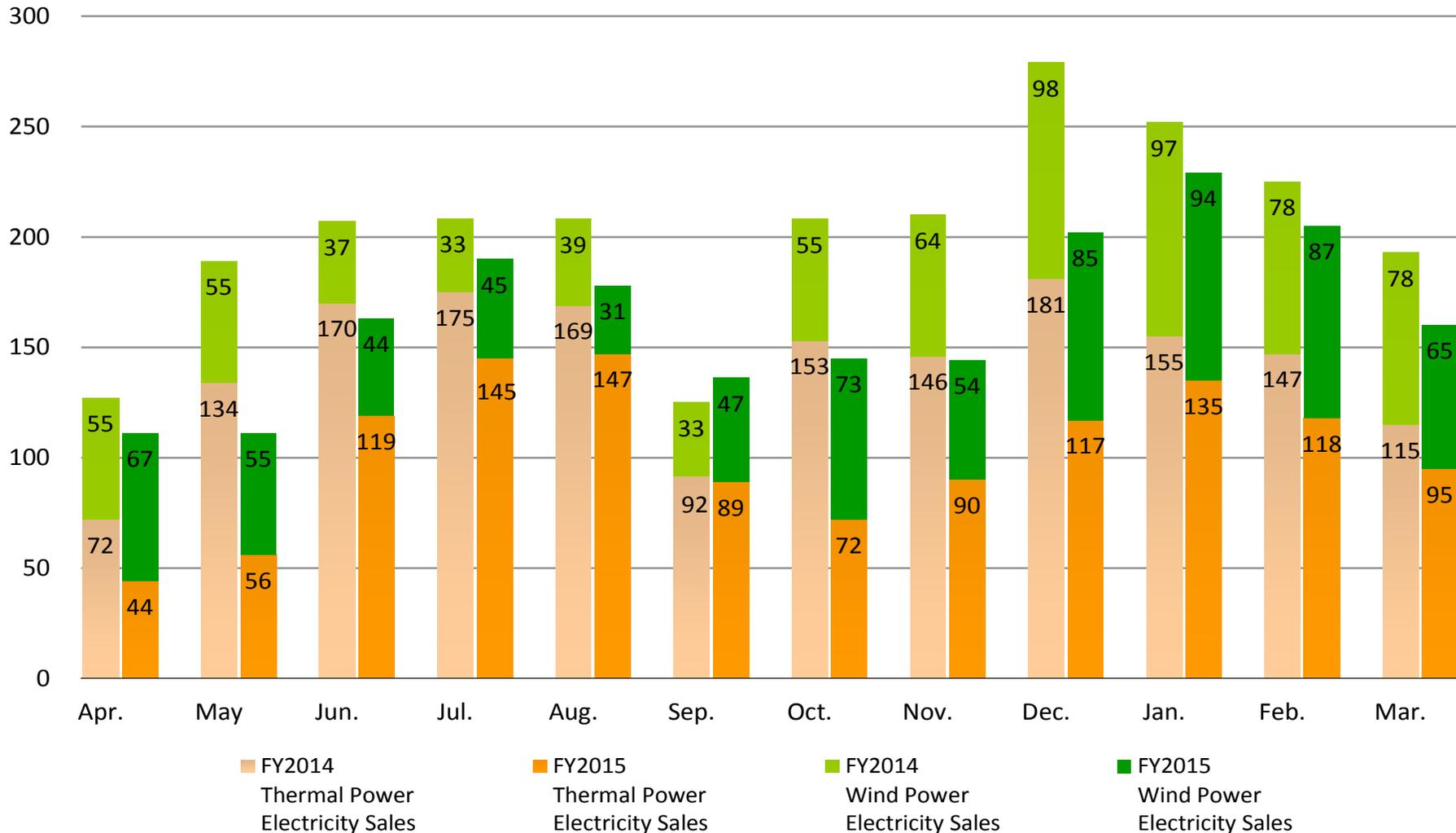
	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. - Mar.
Year-on-year (Hydro)	141%	134%	119%	147%	69%	125%	89%	104%	112%	100%	142%	105%	114%
Year-on-year (Thermal Power)	88%	106%	122%	131%	115%	97%	95%	100%	94%	101%	103%	106%	105%
Year-on-year Total	97%	111%	122%	134%	106%	101%	94%	101%	96%	100%	107%	106%	106%

# (1)-6. Monthly Electricity Sales: Other Electric Power Business



- ▶ Apr. 2014 - Mar. 2015 Results (Cumulative) 2.4TWh
- ▶ Apr. 2015 - Mar. 2016 Results (Cumulative) 1.9TWh

(Million kWh)

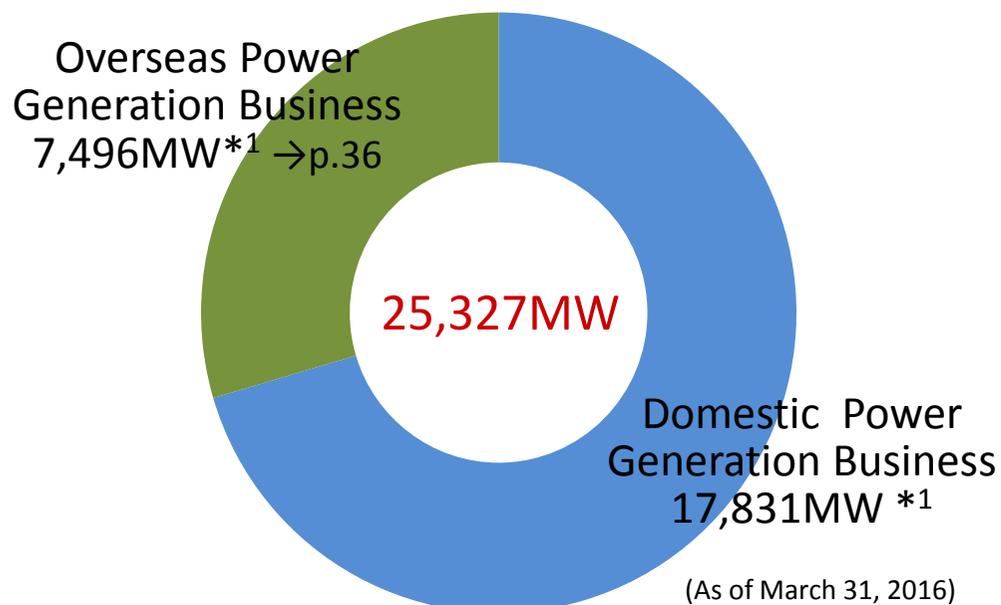


\* Does not take proportion of equity holdings into account

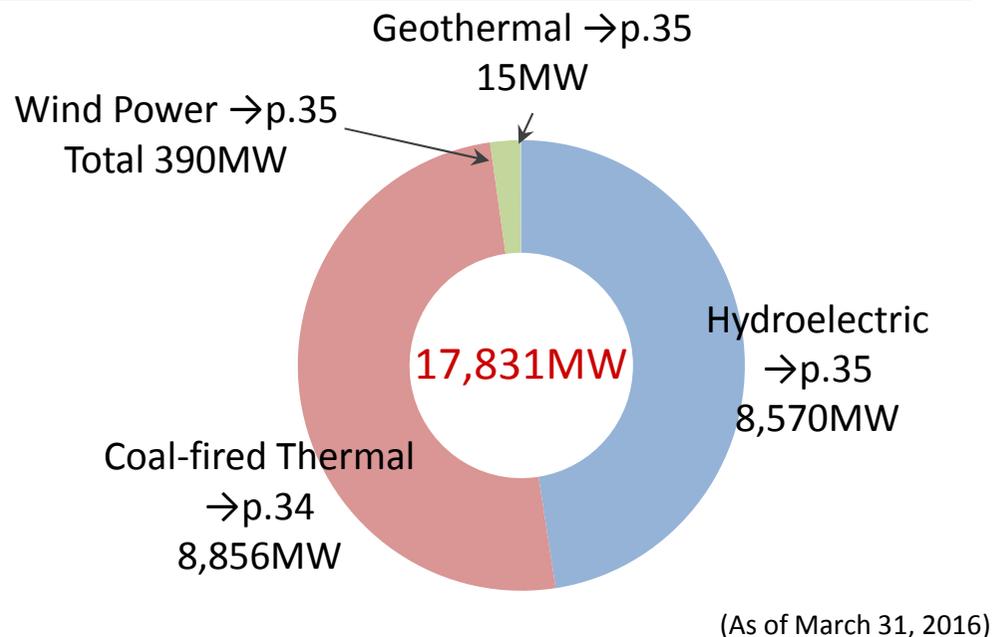
1. Overview of J-POWER Group Power Generation Facilities	··· 33
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## (2)-1. Overview of J-POWER Group Power Generation Facilities

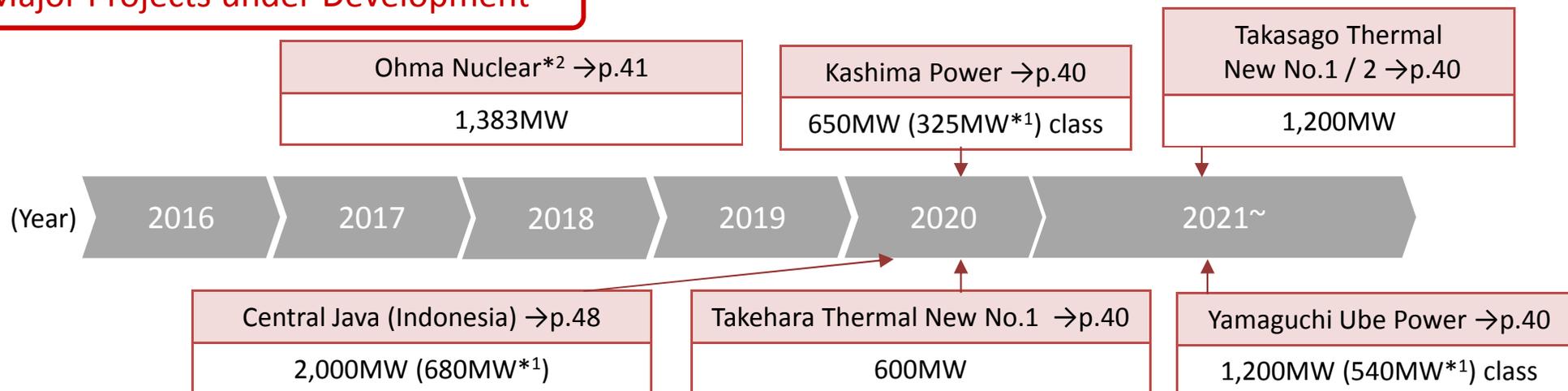
### Consolidated Power Generation Capacity



### Breakdown of Domestic Power Generation Business



### Major Projects under Development



\*<sup>1</sup> Owned capacity: Capacity of each facility is multiplied by J-POWER's investment ratio (equity ratio). \*<sup>2</sup> Schedule of commencement of operation is to be determined.

## (2)-2. Domestic Electric Power Business Facilities (As of March 31, 2016)



Thermal(J-POWER): 7 power plants, 8,374MW

	Power plants (Location)		Beginning of operation	Capacity (MW)
Coal	Isogo (Kanagawa)	New No.1	2002	600
		New No.2	2009	562* <sup>2</sup>
	Takasago (Hyogo)	No.1	1968	250
		No.2	1969	250
	Takehara (Hiroshima)	No.1	1967	250
		No.2	1974	350
		No.3	1983	700
	Tachibanawan (Tokushima)	No.1	2000	1,050
		No.2	2000	1,050
	Matsushima (Nagasaki)	No.1	1981	500
		No.2	1981	500
	Matsuura (Nagasaki)	No.1	1990	1,000
		No.2	1997	1,000
	Ishikawa Coal (Okinawa)	No.1	1986	156
		No.2	1987	156

Thermal(Others): 5 power plants, 482MW\*<sup>1</sup>

Power plants	Location	Fuel	Ownership	Output Capacity (MW)
Bayside Ichihara	Energy Chiba	Gas	100%	108
Mihama Power Shinminato	Seaside Chiba	Gas	100%	105
Itoigawa	Niigata	Coal	80%	134
Tosa	Kochi	Coal	45%	150
Genex Mizue	Kanagawa	Gas oil Residue	40%	238

\*1 Owned capacity: Capacity of each facilities is multiplied by J-POWER's investment ratio (equity ratio).

\*2 Isogo New No.2 Unit is now operated with capacity of 562MW, lowered from 600MW due to breakage of a rotating blade in a low-pressure turbine in December 2012

## (2)-2. Domestic Electric Power Business Facilities (As Of March 31, 2016)

Hydroelectric: 59 power plants, 8,570MW  
 Conventional : 3,600MW  
 Pumped Storage : 4,970MW

Power Plants (100MW-)	Location	Beginning of operation	Capacity (MW)
Shimogo	Fukushima	1988	1,000
Okutadami	Fukushima	1958	560
Otori	Fukushima	1963	182
Tagokura	Fukushima	1959	400
Okukiyotsu	Niigata	1978	1,000
Okukiyotsu No.2	Niigata	1996	600
Numappara	Tochigi	1973	675
Shintoyone	Aichi	1972	1,125
Sakuma	Shizuoka	1956	350
Miboro	Gifu	1961	215
Nagano	Fukui	1968	220
Tedorigawa No.1	Ishikawa	1979	250
Ikehara	Nara	1964	350
Sendaigawa No.1	Kagoshima	1965	120
Other 45 Plants			

Wind Power: 20 wind farms, 390MW\*1

Wind farms (20MW-)	Location	Ownership	Output Capacity (MW)
Tomamae Winvilla	Hokkaido	100%	30.6
Kaminokuni	Hokkaido	100%	28.0
Green Power Kuzumaki	Iwate	100%	21.0
Nikaho Kogen	Akita	67%	24.8
Hiyama Kogen	Fukushima	100%	28.0
Koriyama-Nunobiki	Fukushima	100%	66.0
Irouzaki	Shizuoka	100%	34.0
Tahara Bayside	Aichi	100%	22.0
Awara-Kitagata	Fukui	100%	20.0
Minami Ehime	Ehime	100%	21.6
Minami Oosumi	Kagoshima	99%	26.0

Geothermal : 1 power plant, 15MW

Power Plant	Location	Beginning of Operation	Capacity(MW)
Onikobe	Miyagi	1975	15

\*1 Owned capacity: Capacity of each facilities is multiplied by J-POWER's investment ratio (equity ratio).

## (2)- 3. Overseas Power Generation Projects (As of March 31, 2016)



Projects	Type	Output capacity (MW)	Ownership	Owned capacity (MW)	Power purchaser	Validity of purchase agreement
<b>Thailand (16 projects)</b>		<b>5,947</b>		<b>4,488</b>		
Roi-Et	Biomass (Chaff)	10	24.7%	2	EGAT*1	Valid to 2024
Rayong	CCGT*3	112	20%	22	EGAT*1/ Companies in the industrial park	Valid to 2024
Gulf Cogeneration	CCGT*3	110	49%	54	EGAT*1/ Companies in the industrial park	Valid to 2019
Samutprakarn	CCGT*3	117	49%	57	EGAT*1/ Companies in the industrial park	Valid to 2020
Nong Khae	CCGT*3	120	49%	59	EGAT*1/ Companies in the industrial park	Valid to 2021
Yala	Biomass (Rubber Wood Waste)	20	49%	10	EGAT*1	Valid to 2031
Kaeng Khoi 2	CCGT*3	1,468	49%	719	EGAT*1	Valid to 2033
7 SPPs*2	Consolidated Subsidiaries	790	86.6%	684	EGAT*1/ Companies in the industrial park	Valid to 2038
Nong Seang		1,600	90%	1,440	EGAT*1	Valid to 2039
U-Thai		1,600	90%	1,440	EGAT*1	Valid to 2040
<b>United States (10 projects)</b>		<b>4,494</b>		<b>1,442</b>		
Tenaska Frontier	CCGT*3	830	31%	257	Exelon Generation Company, LLC	Valid to 2020
Elwood Energy	SCGT*4	1,350	25%	338	Constellation / PJM market	Partially valid to 2016/2017
Green Country	CCGT*3	795	50%	398	Exelon Generation Company, LLC	Valid to 2022
Birchwood	Coal	242	50%	121	Virginia Electric and Power Company	Valid to 2021
Pinelawn	CCGT*3	80	50%	40	Long Island Power Authority	Valid to 2025
Equus	SCGT*4	48	50%	24	Long Island Power Authority	Valid to 2017
Fluvanna	CCGT*3	885	15%	133	Shell Energy North America	Valid to 2024
Edgewood	SCGT*4	88	50%	44	Long Island Power Authority	Valid to 2018
Shoreham	Jet Fuel (Simple cycle)	80	50%	40	Long Island Power Authority	Valid to 2017
Orange Grove	SCGT*4	96	50%	48	San Diego Gas & Electric	Valid to 2035

\*1 EGAT(Electricity Generating Authority of Thailand): State-owned electric power utility in Thailand

\*2 7 SPP projects (KP1,KP2,TLC,NNK,NLL,CRN,NK2). J-POWER holds 67.5% stake in NLL and 90% stake in other 6 plants.

\*3 CCGT: Combined Cycle Gas Turbine \*4 SCGT: Simple Cycle Gas Turbine

## (2)- 3. Overseas Power Generation Projects (As of March 31, 2016)



Projects	Type	Output capacity (MW)	Ownership	Owned capacity (MW)	Power purchaser	Validity of purchase agreement
<b>China (5 projects)</b>		<b>8,559</b>		<b>908</b>		
Tianshi	Coal Waste	50	24%	12	Shanxi Province Power Corporation	Renewed every year*1
Hanjiang (Xihe/Shuhe)	Hydroelectric	450	27%	122	Shaanxi Electric Power Company	Renewed every year*1
Gemeng*2	Mainly Coal	5,969	7%	420	Shanxi Province Power Corporation	-
Hezhou	Coal	2,090	17%	355	Guanxi Power Grid Co.	Renewed every year*1
<b>Other country/region (5 projects)</b>		<b>1,446</b>		<b>655</b>		
CBK (3 projects) (Philippines)	Hydroelectric	728	50%	364	National Power Corporation	Valid to 2026
Chiahui (Taiwan)	CCGT*3	670	40%	268	Taiwan Power Company	Valid to 2028
Zajaczkowo (Poland)	Wind Power	48	50%	24	ENERGA OBROT S.A.	Valid to 2023

\*1 Although power purchase agreements are renewed every year, J-POWER makes other agreements with power purchasers for continuous power purchase during the plant operation.

\*2 Gemeng International Energy Co., Ltd. is an electric power company that owns 14 power generation companies.

\*3 CCGT: Combined Cycle Gas Turbine

## (2)-4. Projects under Development in Japan (As of March 31, 2016)



Power plant	Location	Ownership	Output capacity (MW)	Start of operation	Status
<b>Coal-fired (Replacement)</b>			<b>1,100 1,800</b>		
Takehara New No.1	Hiroshima		600 600*1	Jun. 2020	Under construction
Takasago	Hyogo		500 1,200*2	New No.1 : 2021 New No.2 : on and after 2027	In the process of environmental assessment
<b>Coal-fired (New capacity)</b>			<b>1,850</b>		
Kashima Power	Ibaraki	50%	650-class	Jul. 2020	In the process of environmental assessment
Yamaguchi Ube Power	Yamaguchi	45%	1,200-class	No.1 : 2023 No.2 : 2025	In the process of environmental assessment
<b>Hydroelectric</b>			<b>17.0</b>		
Konokitani	Fukui		0.20	Nov. 2016	Under construction
Shinkatsurazawa	Hokkaido		16.8	Jun. 2020	Preparing for construction
<b>Nuclear</b>			<b>1,383</b>		
Ohma	Aomori		1,383	To be determined	Under construction
<b>Wind power</b>			<b>42.5</b>		
Ohma	Aomori	100%	19.5	May. 2016	Under construction
Minami Ehime	Ehime	100%	6.9	Apr. 2016	Under construction
Yurihonjou	Akita	100%	16.1	Feb. 2017	Under construction
<b>Geothermal</b>			<b>42</b>		
Wasabizawa	Akita	50%	42	May 2019	Under construction

\*1 Takehara No.1 and No.2 (total 600MW) are to be replaced with New No.1 (600MW)

\*2 Takasago No.1 and No.2 (total 500MW) are to be replaced with New No.1 and New No.2 (total 1,200MW)

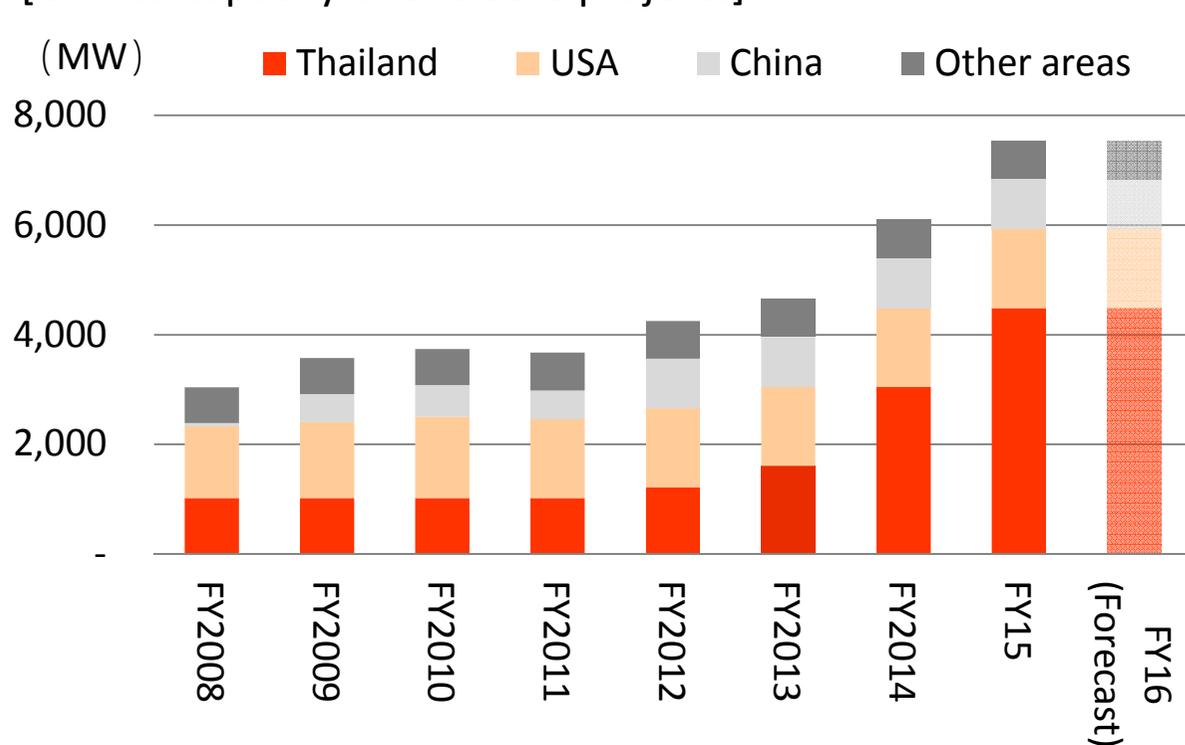
## (2)- 5. Overseas Projects under Development (As of March 31, 2016)



### [Overseas projects under Development]

Project	Type	Output capacity (MW)	Ownership	Owned capacity (MW)	Power purchaser	Validity of purchase agreement	Start of operation	Status
<b>Indonesia</b>		<b>2,000</b>		<b>680</b>				
Central Java	Coal	2,000	34%	680	PT Perusahaan Listrik Negara* <sup>1</sup>	25 years	2020* <sup>2</sup>	Completion of the land acquisition

### [Owned capacity of overseas projects]



Countries/Regions	In operations	Under development	Total
Thailand	4,488	-	4,488
USA	1,442	-	1,442
China	910	-	910
Other areas	656	680	1,336
<b>Total</b>	<b>4,496</b>	<b>680</b>	<b>8,176</b>

\*1 PT Perusahaan Listrik Negara: State-owned electric power utility in Indonesia

\*2 The land acquisition for the project has been completed in March 2016.

## (2)-6. New Coal-fired Power Projects in Japan

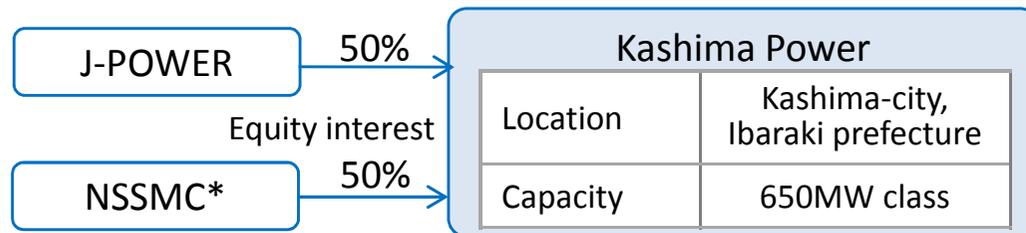
### Takehara Thermal Power Plant New Unit No.1

Location	Takehara-city, Hiroshima prefecture
Status	Under construction for replacement
Start of operation	Scheduled in Jun. 2020
Capacity	600MW → 600MW (Replacement in the same capacity)
Steam Condition	Sub-Critical → Ultra-supercritical

### Takasago Thermal Power Plant New Unit No.1 and 2

Location	Takasago-city, Hyogo prefecture
Status	Implementing environmental assessment
Start of operation	Scheduled in 2021 (New No.1) and on and after 2027 (New No.2)
Capacity	500MW → 1,200MW (Replacement for the larger capacity)
Steam Condition	Sub-Critical → Ultra-supercritical

### Kashima Power (New Capacity)

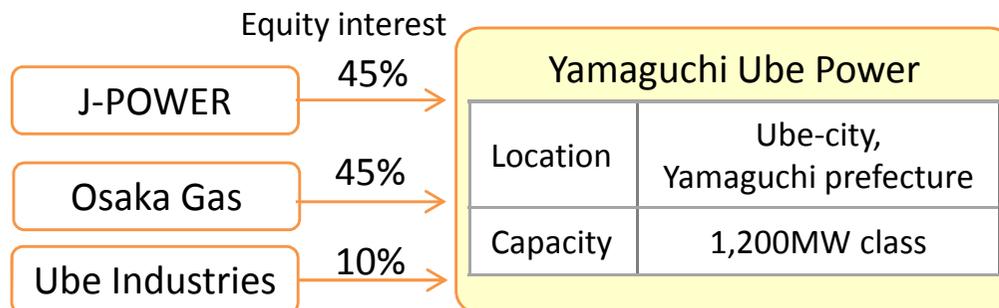


\* Nippon Steel & Sumitomo Metal Corporation

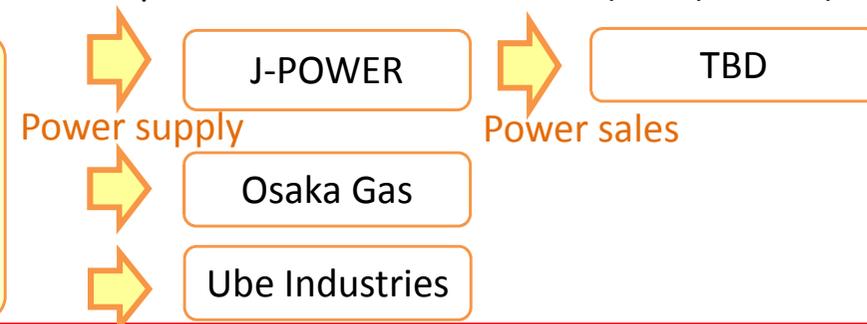
- ✓ Implementing environmental assessment
- ✓ Start of operation scheduled in Jul. 2020



### Yamaguchi Ube Power (New Capacity)



- ✓ Implementing environmental assessment
- ✓ Start of operation scheduled in 2023 (No.1), 2025 (No.2)

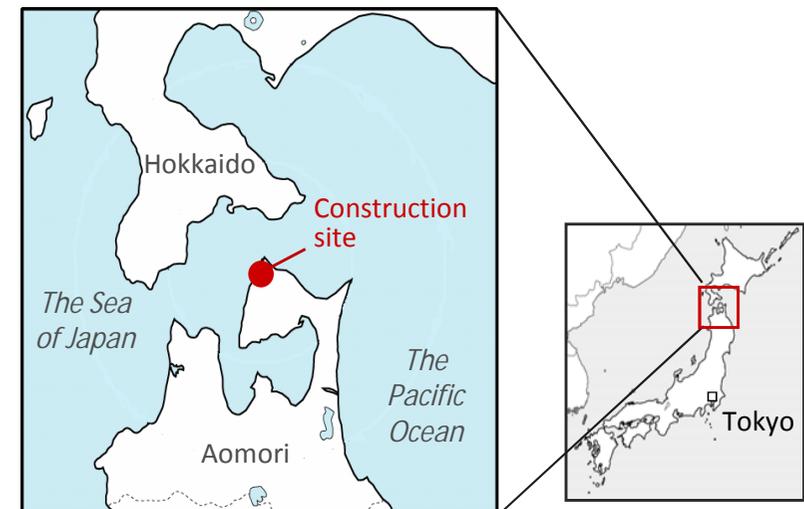


## (2)-7. Ohma Nuclear Power Project

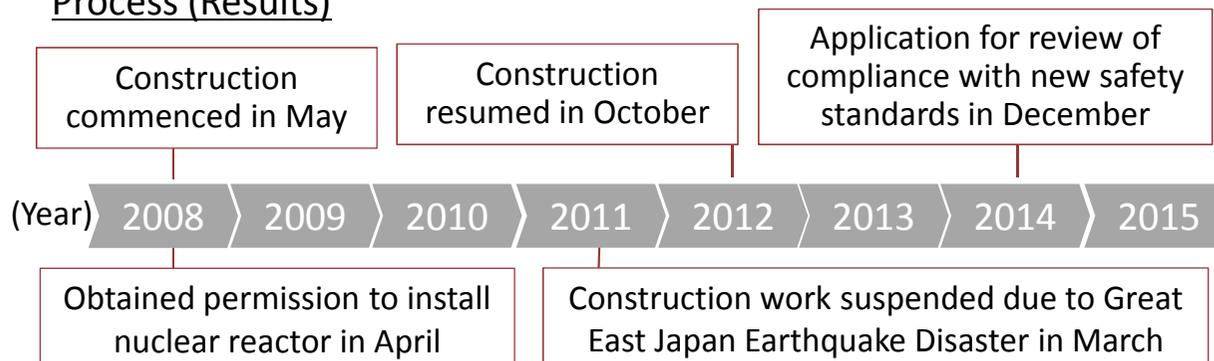
- ▶ On December 16, 2014, J-POWER submitted to NRA\* an application for permission for alteration of reactor installment license and an application for construction plan approval in order to undertake review of compliance with the new safety standards.
- ▶ J-POWER responds to review of NRA properly.
- ▶ J-POWER will continue to promote safety of the project with independent safety measures and others.

### Overview of the Project

Location	Ohma-machi, Shimokita-gun, Aomori Prefecture
Capacity	1,383MW
Type of nuclear reactor	Advanced Boiling Water Reactor (ABWR)
Fuel	Enriched uranium and uranium-plutonium mixed oxide (MOX)
Commencement of operations	To be determined



### Process (Results)



\* Nuclear Regulatory Authority

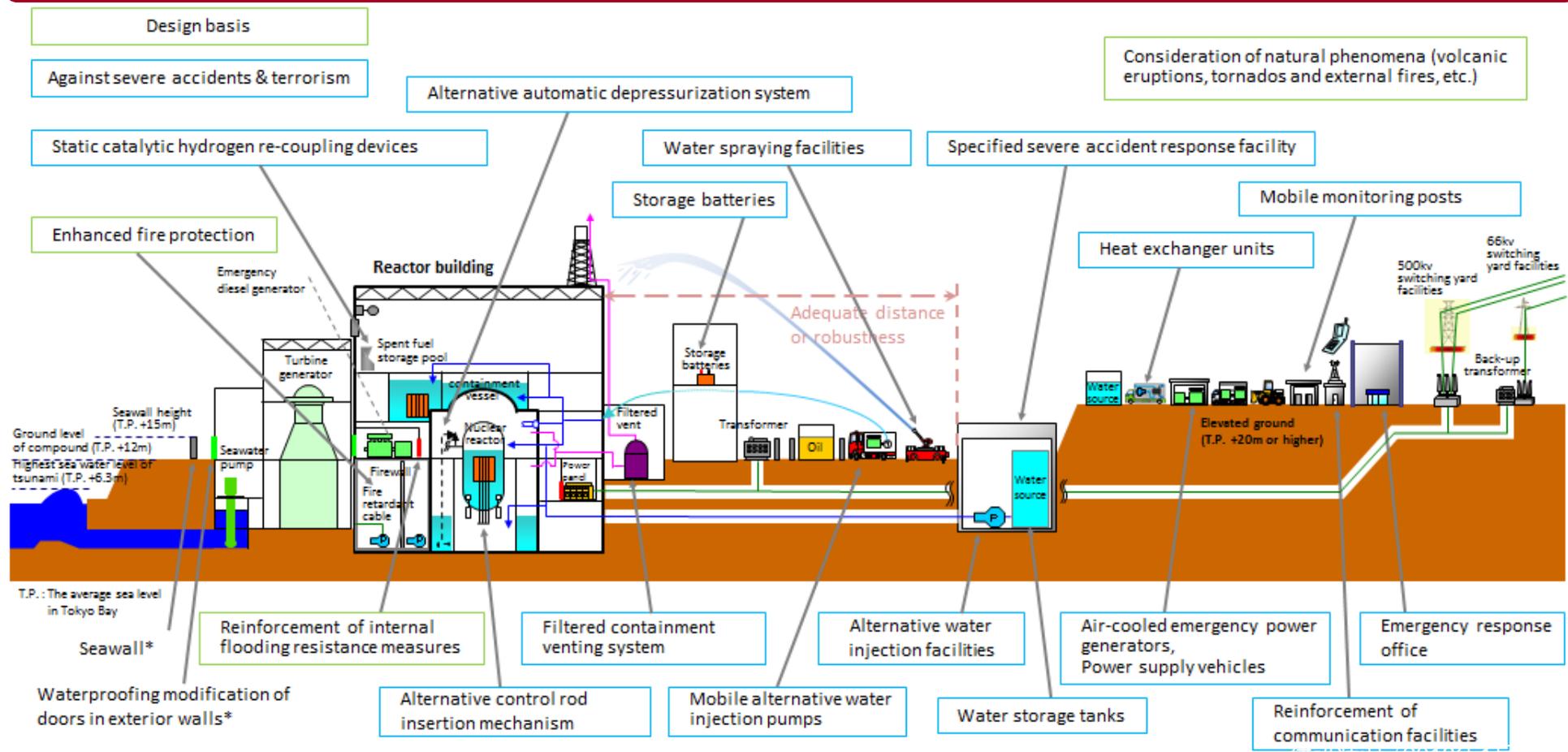
■ Construction Works for Measures for Reinforcing Safety

✓ Construction Period: From November 2016 to December 2021

✓ Construction Cost: Approx. 130 billion yen

(The construction plan is based on J-POWER's projections, which incorporate estimations of examination and permit process durations by the NRA)

Measures for Reinforcing Safety



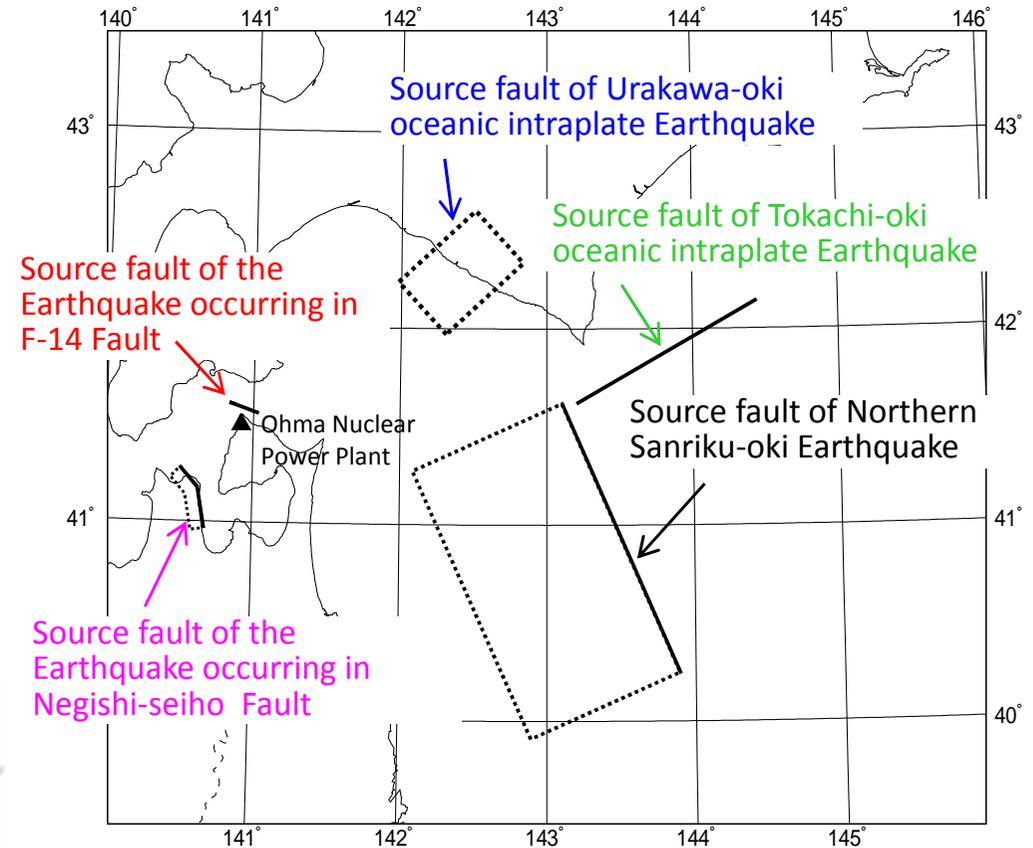
\*Independent measures

■ Earthquakes for Investigation

✓ Earthquakes listed below have been investigated by each earthquake type

Earthquake type	Earthquake for investigation	Magnitude
Interplate earthquakes	Northern Sanriku-oki Earthquake*	Mw8.3
Oceanic intraplate earthquakes	Urakawa-oki oceanic intraplate Earthquake	M7.5
	Tokachi-oki oceanic intraplate Earthquake	M8.2
Inland crustal earthquakes	Earthquake occurring in Negishi-seiho Fault	M7.5
	Earthquake occurring in F-14 Fault	M6.7

\* Evaluation considering uncertainty of simultaneous rupture of north-off Sanriku area and off Tokachi and off Nemuro areas along Kuril trench (Mw9.0), based on experience of the 2011 off the Pacific coast of Tohoku Earthquake



Source faults of earthquakes for investigation

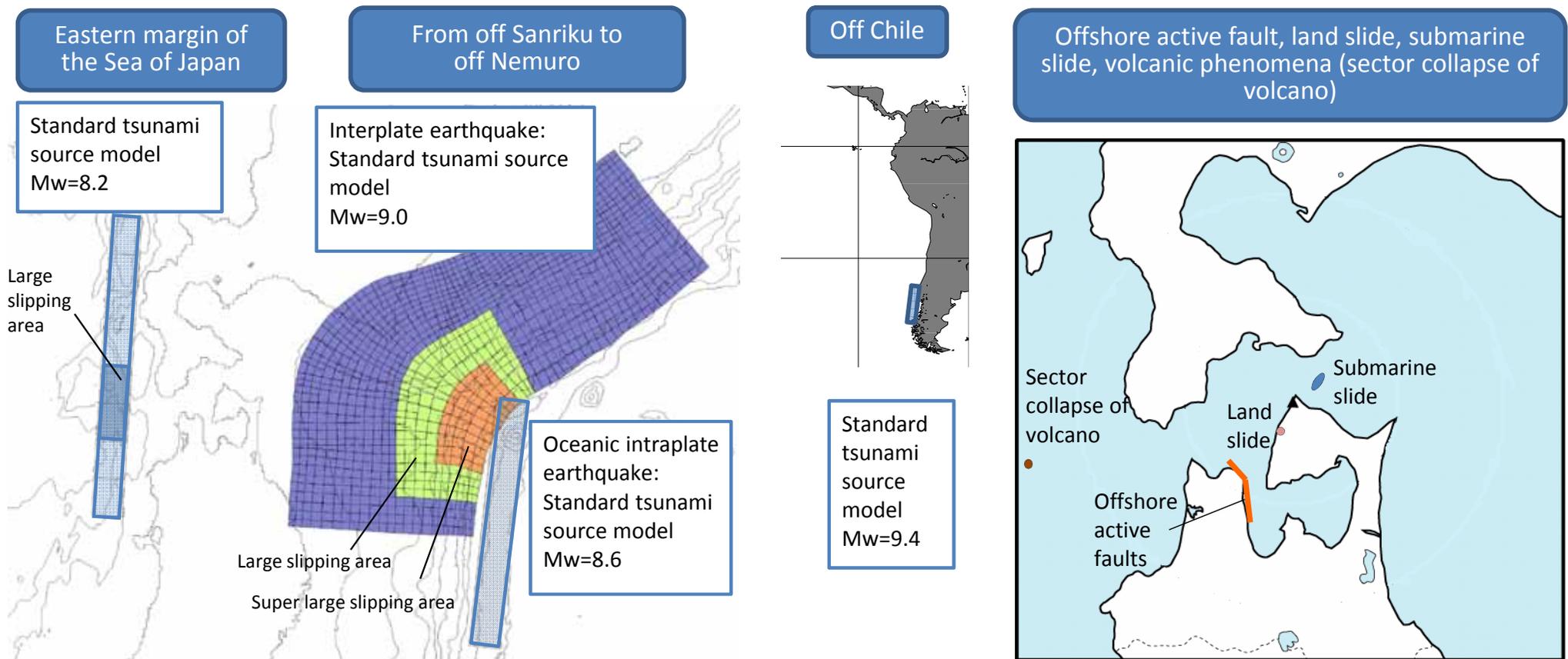


**Standard seismic motion:** Horizontal 650 cm/s<sup>2</sup>  
(Maximum acceleration) Vertical 435 cm/s<sup>2</sup>

## (2)-8. Response to the New Safety Standards at the Ohma Nuclear Power Plant (Main Conditions)

### ■ Design Basis Tsunamis

- ✓ Tsunami source models based on the latest knowledge such as the 2011 off the Pacific coast of Tohoku Earthquake Tsunami
- ✓ Estimated earthquakes larger than ever considered as tsunami sources at the eastern margin of the Sea of Japan, from off Sanriku to off Nemuro, off Chile and offshore active faults
- ✓ Taking into consideration of non-earthquake-oriented tsunamis (caused by land slide, submarine slide, sector collapse of volcano)



The highest sea water level by design basis tsunami: approx. T.P.+6.3m  
The lowest sea water level by design basis tsunami: approx. T.P.-4.1m

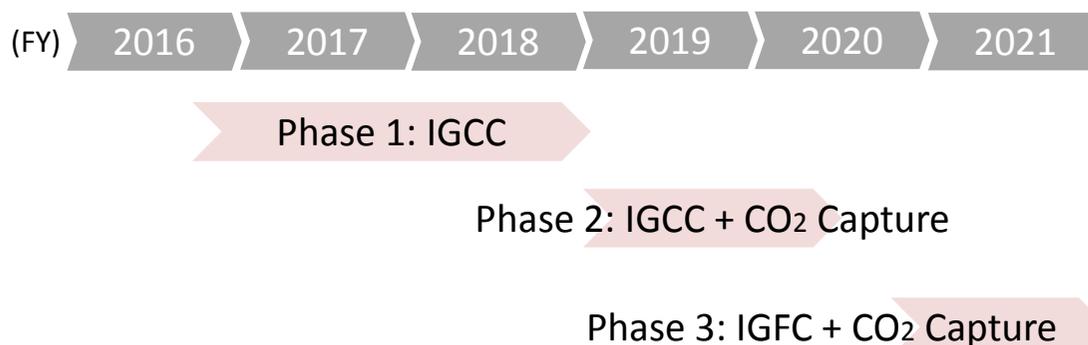
## (2)-9. Osaki CoolGen Project: Demonstration Test of Oxygen-blown IGCC J-POWER

Large-scale demonstration test on oxygen-blown IGCC and IGFC, CO<sub>2</sub> capture to verify total system performance before commercialization

Organization	Osaki CoolGen Corporation (Ownership: J-POWER 50%, Chugoku Electric Power Company 50%)
Location	Chugoku Electric Power Company Osaki Power Station premises (Hiroshima)
Output	166MW (Coal consumption: 1,180 t/day)



### Demonstration Test Schedule



Construction of IGCC demonstration plant commenced on March 2013.

- Integrated Coal Gasification Combined Cycle (IGCC):  
An integrated power generation system with a twin-turbine configuration; the gas produced from coal is used as fuel to drive a gas turbine, the exhaust gas from which is used in a steam turbine
- Integrated Coal Gasification Fuel Cell Combined Cycle (IGFC):  
Most efficient coal-fired power generation system combining fuel cells with gas and steam turbines in a triply integrated power generation configuration

## (2)-10. Projects in Thailand by Consolidated Subsidiaries

	Overview	Development
<p><b>7 SPP*1</b></p> <p>Capacity: 790MW (110MW x 5) (120MW x 2) Type: CCGT*2</p>	<ul style="list-style-type: none"> <li>Projects based on the SPP Program*1 of the Thai Government</li> <li>Development of seven 100MW-class cogeneration power plants</li> <li>Sale of electricity to EGAT*3 and customers in the vicinity for a period of 25 years (steam and cold water also provided to nearby customers)</li> <li>J-POWER holds a 90% stake in 6 plants and a 67.5% stake*4 in a plant.</li> </ul>	<p>11/2009 Signed the PPAs</p> <p>10/2010 Signed the loan agreements</p> <p>01/2013 COD*5 of the first of the seven projects</p> <p>10/2013 COD*5 of the last of the seven projects</p>
<p><b>Nong Seang IPP</b></p> <p>Capacity: 1,600MW (800MW x 2 units) Type: CCGT*2</p>	<ul style="list-style-type: none"> <li>After startup of operations, the plants will sell electricity to EGAT*3 for a period of 25 years.</li> </ul>	<p>12/2007 Awarded in an international tender</p> <p>10/2008 Signed the PPA</p> <p>11/2011 Signed the loan agreements</p> <p>06/2014 COD*5 of the unit No.1</p> <p>12/2014 COD*5 of the unit No.2</p>
<p><b>U-Thai IPP</b></p> <p>Capacity: 1,600MW (800MW x 2 units) Type: CCGT*2</p>	<pre> graph TD     JP["J-POWER"] -- 90% --&gt; GJPC["Gulf JP Co., Ltd."]     LP["Local partner"] -- 10% --&gt; GJPC     GJPC -- 100% --&gt; PC["Project Company"]     PC -- "Gas supply agreement" --&gt; PTT["PTT*6"]     PC -- "PPA" --&gt; EGAT["EGAT*3"]         </pre>	<p>12/2007 Awarded in an international tender</p> <p>10/2008 Signed the PPA</p> <p>10/2012 Signed the loan agreements</p> <p>06/2015 COD*5 of the unit No.1</p> <p>12/2015 COD*5 of the unit No.2</p>

\*1 SPP (Small Power Producers) program: The long-term power purchase scheme established by the Thai Government. This scheme promotes cogeneration systems, renewable energy, and so forth, and aims at reducing the import and use of fuel oil. EGAT guarantees the purchase of electricity generated from eligible suppliers up to 90MW of capacity.

\*2 CCGT: Combined Cycle Gas Turbine

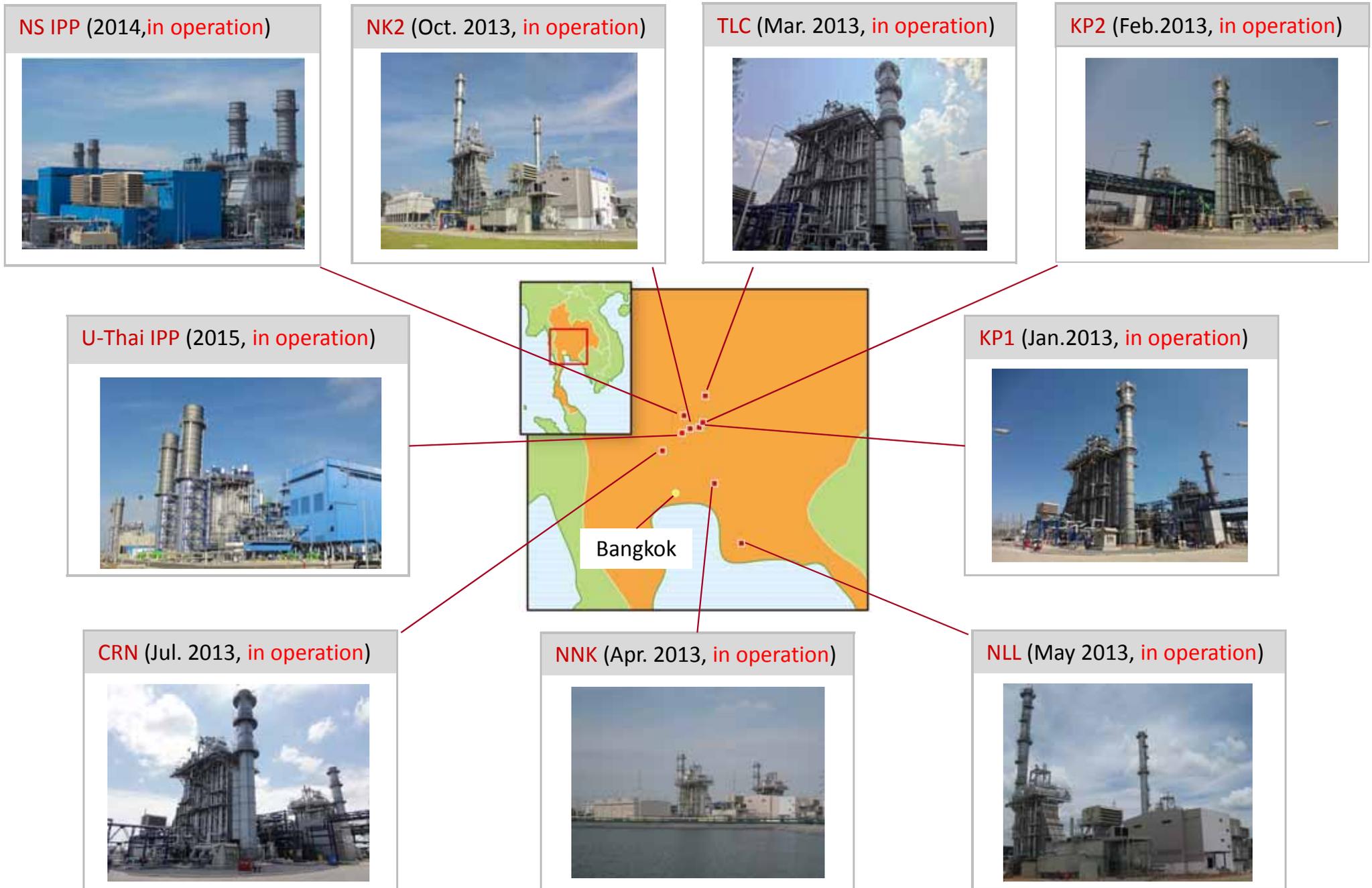
\*3 EGAT (Electricity Generating Authority of Thailand): State-owned electric power utility in Thailand

\*4 As for NLL project of 7 SPP Projects, a part of its stake was sold to an operating company of its industrial park in January 2013.

\*5 COD: Commercial operation date

\*6 PTT: State-owned gas and oil company in Thailand

## (2)-10. Projects in Thailand by Consolidated Subsidiaries (continued)

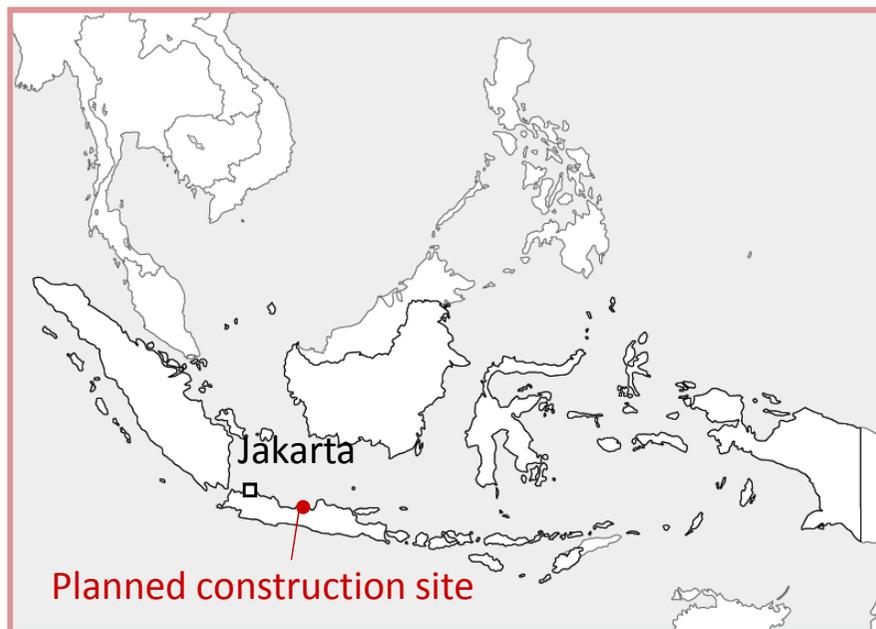


Note: Particulars in parentheses: (Start of operation)

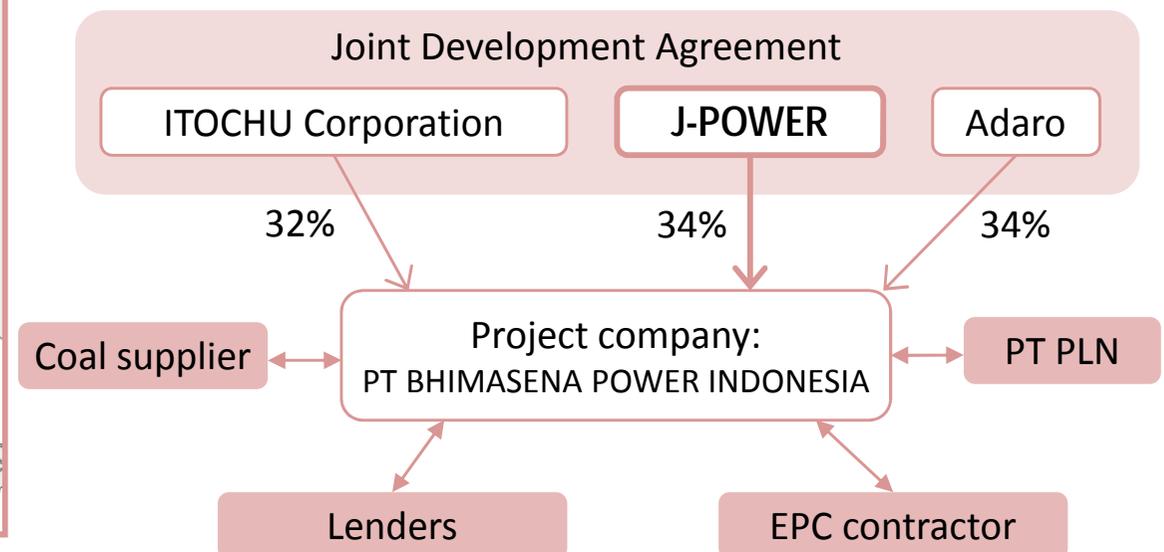
## (2)-11. Central Java IPP Project in Indonesia

Type and output	Overview	Current status
Type: Coal-fired (USC*) Output: 2,000 MW (1,000MW x 2 units)	<ul style="list-style-type: none"> <li>• IPP project (newly developed coal-fired power plant) awarded through international tender in Indonesia in 2011.</li> <li>• The plan is to construct a high-efficiency coal-fired power plant on the island of Java.</li> <li>• After startup of operation, the plant will sell electricity to Indonesia's state-owned power utility (PT PLN(Persero)) for a period of 25 years.</li> </ul>	<ul style="list-style-type: none"> <li>✓ The land acquisition for the project has been completed in March 2016.</li> <li>✓ The construction will be completed in 2020.</li> </ul>

\*USC: Ultra -Supercritical



### Outline of the scheme



## (2)-12. Coal Mine Projects in Australia

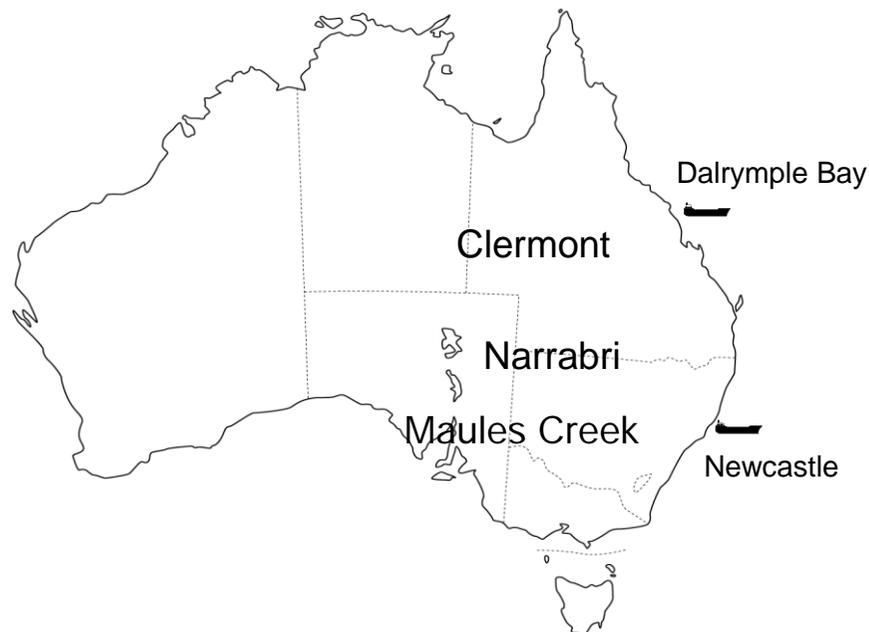
### Coal Mine Projects

Coal mine	Location	Loading port	Production volume in 2015* <sup>1</sup>	Ownership* <sup>2</sup>	Start of commercial production
Clermont	Queensland	Dalrymple Bay	13.09 Million t	15%	2010
Narrabri	New South Wales	Newcastle	7.61 Million t	7.5%	2010
Maules Cleek	New South Wales	Newcastle	4.99 Million t (Approx. 10.7 million t/yr)	10%	2014

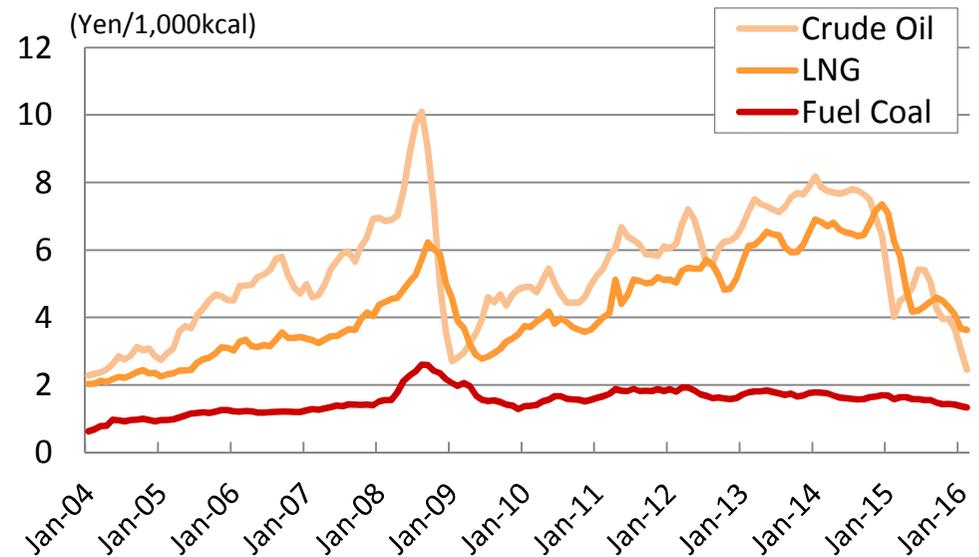
\*1 The production volumes in parentheses represent figures for anticipated peak production.

\*2 Investment through a subsidiary, J-POWER AUSTRALIA PTY., LTD.

Note: Blair Athol Coal Mine in which J-POWER Group holds a 10% stake finished production on November 2012.



### Calorific Unit Price by Fossil Fuel (Imports) in Japan



Data charted up to February 2016

Source: The Institute of Energy Economics, Japan



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<http://www.jpowers.co.jp/english/>

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