

Summary of FY2013 Earnings Results



Electric Power Development Co., Ltd.

April 30, 2014

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 FY2013 Earnings Results

Summary of FY2013 Earnings Results



(Unit: billion yen)

Consolidated	FY2012 (Apr.-Mar.)	FY2013 (Apr.-Mar.)	Year-on-year change		FY2013 Prior forecast* (Apr.-Mar.)	Comparison with the forecast*	
Operating Revenue	656.0	706.8	50.7	7.7 %	706.0	0.8	0.1 %
Operating Income	54.5	59.1	4.6	8.4 %	60.0	(0.8)	(1.4) %
Ordinary Income	44.8	40.0	(4.7)	(10.6) %	43.0	(2.9)	(6.8) %
Net Income	29.8	28.6	(1.1)	(3.7) %	30.0	(1.3)	(4.4) %

Non-consolidated	FY2012 (Apr.-Mar.)	FY2013 (Apr.-Mar.)	Year-on-year change		FY2013 Prior forecast* (Apr.-Mar.)	Comparison with the forecast*	
Operating Revenue	586.9	582.8	(4.1)	(0.7) %	583.0	(0.1)	(0.0) %
Operating Income	43.3	40.4	(2.8)	(6.6) %	43.0	(2.5)	(5.9) %
Ordinary Income	28.8	31.0	2.2	7.7 %	35.0	(3.9)	(11.3) %
Net Income	18.5	22.1	3.5	18.9 %	27.0	(4.8)	(18.1) %

* The Prior Forecast is the revised earnings forecast released on January 31, 2014.

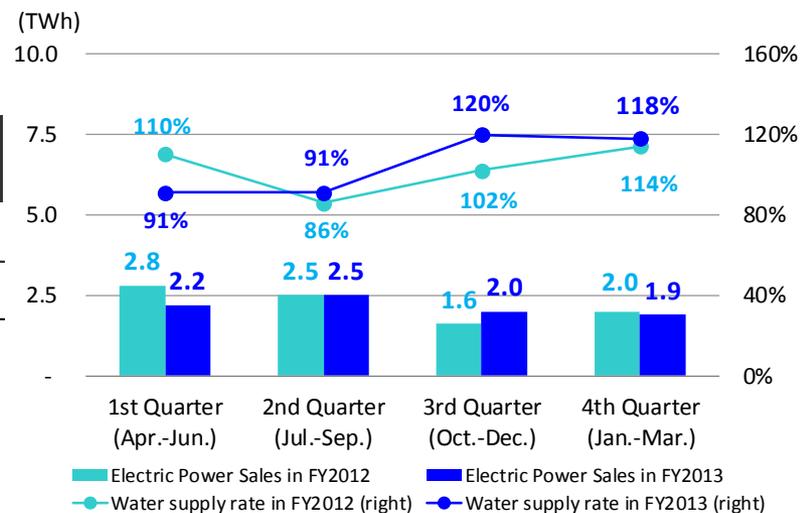
Key Data (Electric Power Sales)

	FY2012 (Apr.-Mar.)	FY2013 (Apr.-Mar.)	Year-on-year change	
Electric Power Sales (TWh)				
Electric Power Business	65.6	65.4	(0.1)	(0.3)%
Hydroelectric (Wholesale Electric Power)	9.0	8.7	(0.2)	(3.0)%
Thermal (Wholesale Electric Power)	54.3	54.3	(0.0)	(0.0)%
Other Electric Power Business	2.2	2.3	0.1	4.7%
Overseas Business*	-	3.6	3.6	-
Water supply rate (Wholesale Electric Power)	102%	99%	(3)points	
Load factor (Wholesale Electric Power)	78%	79%	+1point	

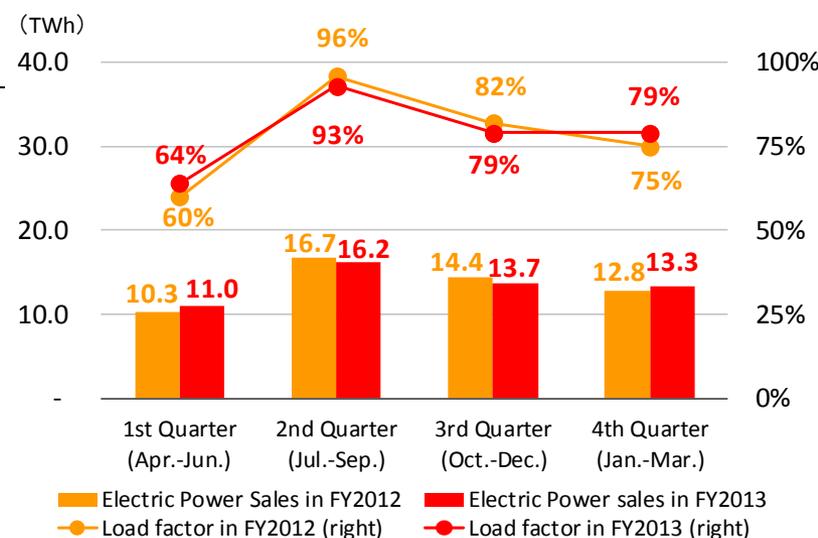
* Electric power sales volume of overseas consolidated subsidiaries (Electric power sales volume of equity method affiliated companies is not included.)

Electric Power Sales for each Quarter

[Hydroelectric (Wholesale Electric Power)]



[Thermal (Wholesale Electric Power)]



Key Data (Operating Revenue)



	FY2012 (Apr.-Mar.)	FY2013 (Apr.-Mar.)	Year-on-year change	
Operating Revenue (Billion yen)	656.0	706.8	50.7	7.7%
Electric Power Business	605.3	609.0	3.7	0.6%
Hydroelectric (Wholesale Electric Power)	106.6	104.7	(1.9)	(1.8)%
Thermal (Wholesale Electric Power)	413.9	411.8	(2.0)	(0.5)%
Other Electric Power Business	30.7	37.8	7.1	23.3%
Overseas Business	1.6	42.8	41.1	-
Other Business	49.0	54.9	5.8	11.9%
Average foreign exchange rate (Yen/US\$)	82.91	100.17		
Foreign exchange rate at the end of FY (Yen/THB)	2.82	3.20		
Foreign exchange rate at the end of FY (THB/US\$)	30.63	32.81		

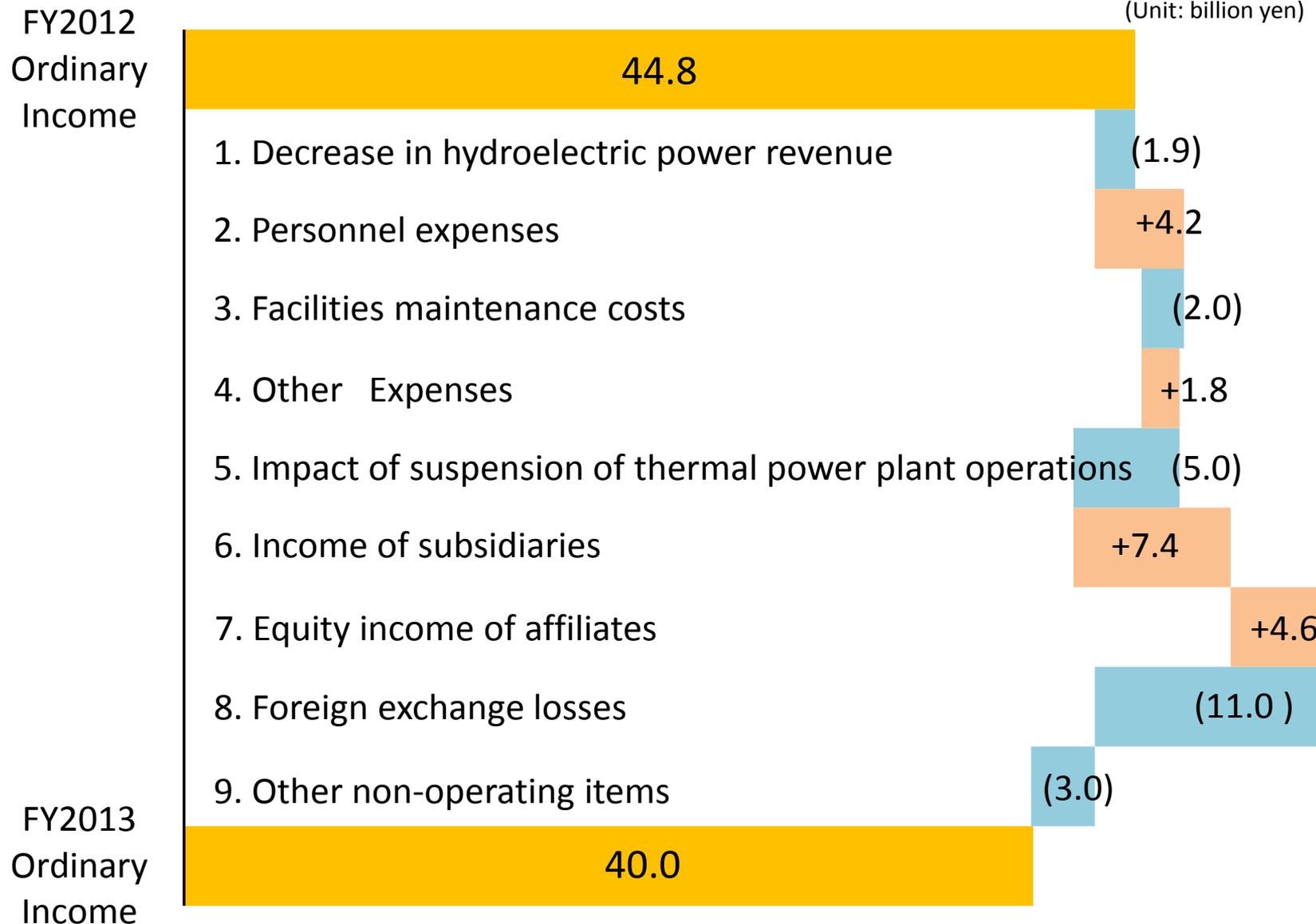
*1 Sales for the overseas business segment (Sales from overseas consolidated subsidiaries and overseas consulting business, etc.)

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

FY2013 Earnings Results (Main Factors for Change)



(Unit: billion yen)



Revenue / Expenditure Comparison



(Unit: billion yen)

	FY2012 (Apr.-Mar.)	FY2013 (Apr.-Mar.)	Year-on-year change	Main factors for change
Operating Revenue	656.0	706.8	50.7	
Electric power business	605.3	609.0	3.7	Non-consolidated (3.9), Subsidiaries and others +7.6
Overseas business	1.6	42.8	41.1	Commencement of commercial operation of SPP projects in Thailand
Other business	49.0	54.9	5.8	Non-consolidated +0.2, Subsidiaries and others +5.6
Operating Expenses	601.4	647.6	46.1	
Operating Income	54.5	59.1	4.6	Non-consolidated (2.8), Subsidiaries and others +7.4
Non-operating Revenue	17.5	22.3	4.7	
Equity income of affiliates	11.7	16.3	4.6	Overseas business +4.7 from 11.0 in FY2012 to 15.8 in FY2013
Other	5.8	5.9	0.1	
Non-operating Expenses	27.3	41.4	14.1	
Interest expenses	22.3	25.3	2.9	Commencement of commercial operation of SPP projects in Thailand and others
Foreign exchange loss	0.9	11.1	10.1	
Other	3.9	4.9	0.9	
Ordinary Income	44.8	40.0	(4.7)	
Extraordinary income	-	2.3	2.3	Insurance income
Net Income	29.8	28.6	(1.1)	

Balance Sheet



(Unit: billion yen)

	FY2012 End of FY	FY2013 End of FY	Change from prior year end	Main factors for change
Noncurrent Assets	1,975.2	2,149.5	174.3	
Electric utility plant and equipment	1,058.8	1,023.7	(35.0)	Non-consolidated (42.2), Subsidiaries and others +7.1
Overseas business facilities	14.3	125.0	110.7	
Other noncurrent assets	104.5	109.7	5.2	
Construction in progress	464.6	512.6	47.9	Non-consolidated +35.9, Subsidiaries and others +11.9
Nuclear fuel	59.7	69.2	9.4	
Investments and other assets	273.0	309.2	36.1	Long-term investment +41.7, Deferred tax assets (6.4)
Current Assets	194.7	235.6	40.9	
Total Assets	2,169.9	2,385.2	215.3	
Interest-bearing debt	1,523.0	1,649.9	126.9	Non-consolidated +31.2, Subsidiaries +95.6 [Long-term loans +112.6, Corporate bonds +16.4]
Others	192.9	215.7	22.7	
Total Liabilities	1,716.0	1,865.7	149.7	
Shareholders' equity	460.6	478.8	18.1	Increase in retained earnings
Accumulated other comprehensive income	(6.7)	37.3	44.1	Foreign currency translation adjustment +27.6, Deferred gains or losses on hedges +8.7, Valuation difference on available-for-sale securities +4.1
Minority interests	(0.0)	3.2	3.2	
Total Net Assets	453.8	519.4	65.5	
D/E ratio (x)	3.4	3.2		
Shareholders' equity ratio	20.9%	21.6%		

II. Summary of FY2014 Earnings Forecast

Summary of FY2014 Earnings Forecast



The impact of the accident at Matsuura No.2 Unit in which the low-pressure turbine rotor fell on March 28, 2014 is not reflected in this earnings forecast as the restoration method and timing is still uncertain.

(Unit: billion yen)

	Consolidated				Non-consolidated			
	FY2013 Result	FY2014 Forecast	Comparison with FY2013 result		FY2013 Result	FY2014 Forecast	Comparison with FY2013 result	
Operating Revenue	706.8	754.0	47.1	6.7%	582.8	578.0	(4.8)	(0.8)%
Operating Income	59.1	69.0	9.8	16.6%	40.4	41.0	0.5	1.3%
Ordinary Income	40.0	57.0	16.9	42.2%	31.0	28.0	(3.0)	(9.9)%
Net Income	28.6	41.0	12.3	42.9%	22.1	20.0	(2.1)	(9.6)%

	Cash dividends per share		
	Interim	Year end	Annual
FY2013	35 yen	35 yen	70 yen
FY2014 (Forecast)	35 yen	35 yen	70 yen

(Note) Currently, J-POWER is engaged in efforts toward early restoration and plan to solidify restoration periods, methods and other considerations by the end of May 2014. Earnings forecasts may be revised depending on the findings.

	FY2013 Result	FY2014 Forecast	Comparison with FY2013 Result	
Electric Power Sales (TWh)				
Electric Power Business	65.4	66.0	0.6	(1.0)%
Hydroelectric (Wholesale Electric Power)	8.7	9.1	0.4	(4.8)%
Thermal (Wholesale Electric Power)	54.3	54.3	0.0	0.0%
Other Electric Power Business	2.3	2.5	0.1	8.4%
Overseas Business*1	3.6	9.3	5.6	154.4%
Operating Revenue (Billion yen)	706.8	754.0	47.1	6.7%
Electric Power Business	609.0	605.0	(4.0)	(0.7)%
Hydroelectric (Wholesale Electric Power)	104.7	107.0	2.2	2.1%
Thermal (Wholesale Electric Power)	411.8	409.0	(2.8)	(0.7)%
Other Electric Power Business	37.8	39.0	1.1	3.0%
Overseas Business*2	42.8	96.0	53.1	124.1%
Other Business*3	54.9	53.0	(1.9)	(3.5)%

	FY2013 Result	FY2014 Forecast
Water supply rate	99%	100%
Load factor	79%	79%
Foreign exchange rate at term end		
Yen/US\$	105.39	100
Yen/THB	3.20	3.1
THB/US\$	32.81	32.8
Average foreign exchange rate		
Yen/US\$	100.17	100

*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)

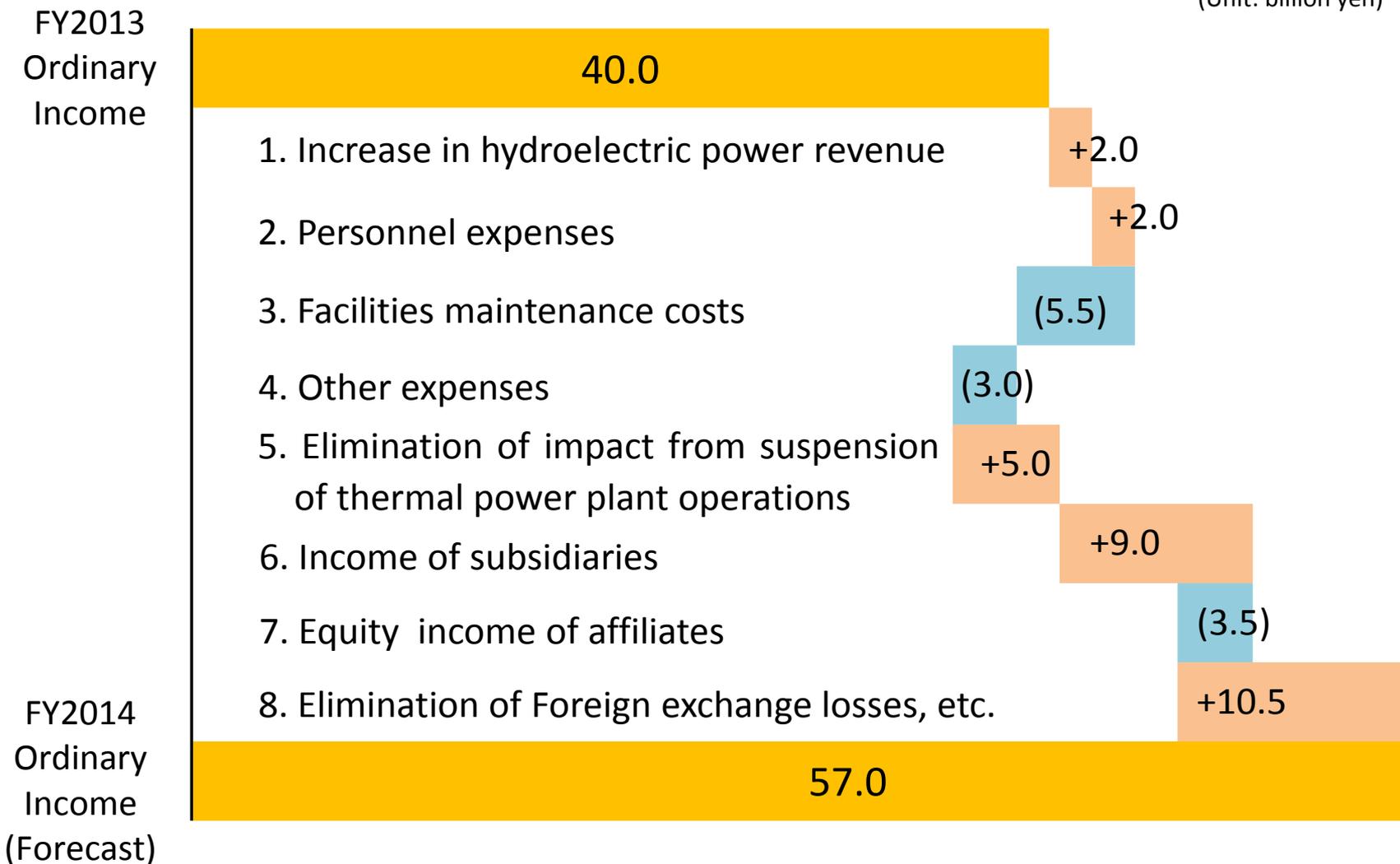
*2 Sales for the overseas business segment (Sales from overseas consolidated subsidiaries and overseas consulting business, etc.)

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

FY2014 Earnings Forecast (Main Factors for Change)



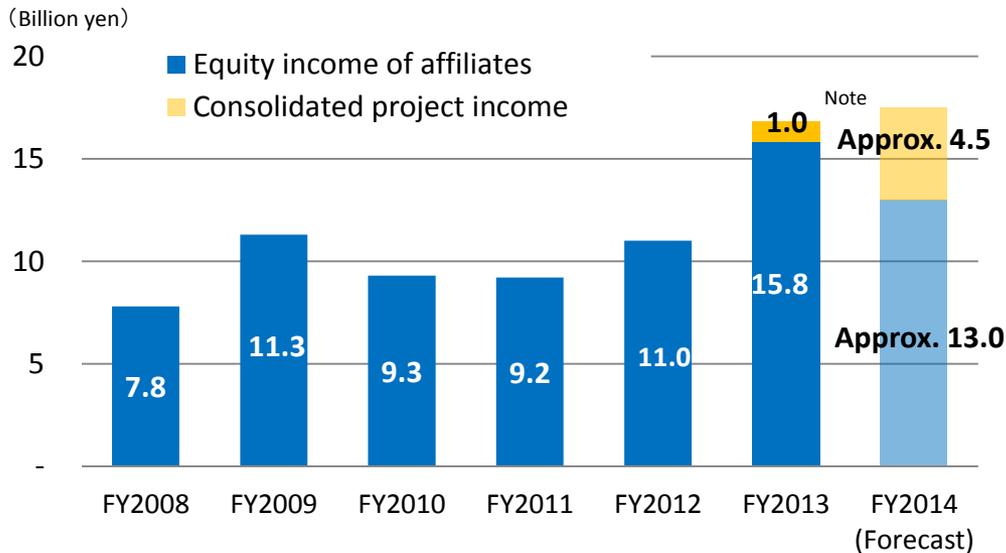
(Unit: billion yen)



(Note) The impact of the accident at Matsuura No.2 Unit in which the low-pressure turbine rotor fell on March 28, 2014 is not reflected in this earnings forecast as the restoration method and timing is still uncertain.

- ▶ In Thailand, Nong Saeng project is to commence operation in FY2014.
- ▶ Equity equivalent income* in FY2014 is expected to be approximately 17.5 billion yen.

Equity Equivalent Income* of Overseas Power Generation Business



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, with such losses amounting to 1.9 billion yen in FY2013. Actual equity equivalent income in FY2013, including foreign exchange losses, was ▲0.6 billion yen.

Recent Status of Overseas New Projects

- ▶ **Thailand**
 - All 7SPP projects began commercial operation by October 2013.
 - Construction of both the Nong Saeng and U-Thai projects is proceeding on schedule.
- ▶ **Indonesia**
 - Delayed from its original schedule to commence construction due to delay of obtaining necessary land for the project.
 - The deadline for setting up financing under the long term power purchase agreement extended to October 2014.

Foreign exchange rate (as of December)

	FY2012	FY2013	FY2014(Forecast)
Yen/US\$	86.58	105.39	100
Yen/THB	2.82	3.20	3.1
THB/US\$	30.63	32.81	32.8

* Equity equivalent income: The total of equity income of affiliates 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 equity income of affiliates and consolidated project income do not correspond to segment data.

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(1)-1. Consolidated: Revenues and Expenses



(Unit: 100 million yen)

	FY2009	FY2010	FY2011	FY2012	FY2013
Operating revenues	5,844	6,359	6,546	6,560	7,068
Electric power operating revenues	5,302	5,844	6,097	6,053	6,090
Overseas business operating revenues	15	18	20	16	428
Other operating revenues	526	496	428	490	549
Operating expenses	5,355	5,653	6,048	6,014	6,476
Operating income	489	705	498	545	591
Non-operating revenues	187	149	153	175	223
Equity income of affiliates	117	90	95	117	163
Others	70	58	57	58	59
Non-operating expenses	259	292	285	273	414
Interest expenses	230	223	220	223	253
Others	28	68	65	49	161
Ordinary income	416	563	366	448	400
Extraordinary income	-	16	-	-	23
Extraordinary loss	-	191	33	-	-
Net income	291	195	161	298	286

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



(Unit: 100 million yen)

	FY2009	FY2010	FY2011	FY2012	FY2013	YOY change
Operating revenues	5,304	5,832	5,999	5,869	5,828	(41)
Electric power operating revenues	5,186	5,738	5,905	5,772	5,729	(43)
Hydroelectric	1,089	1,081	1,084	1,066	1,047	(19)
Thermal	3,496	4,064	4,244	4,139	4,119	(20)
Transmission and others	599	592	576	566	562	(4)
Incidental business	117	93	94	97	99	2
Operating expenses	4,895	5,205	5,576	5,436	5,423	(12)
Electric power operating expenses	4,790	5,133	5,490	5,347	5,334	(13)
Personnel costs	361	312	344	340	298	(42)
Amortization of the actuarial difference	34	(22)	17	5	(30)	(36)
Fuel costs	1,739	2,099	2,384	2,384	2,502	118
Repair and maintenance costs	453	506	542	564	585	20
Depreciation and amortization costs	1,155	1,060	1,004	894	815	(79)
Others	1,079	1,154	1,213	1,162	1,133	(29)
Incidental business	104	71	86	88	89	0
Operating income	409	626	423	433	404	(28)

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

	FY2009	FY2010	FY2011	FY2012	FY2013
Electricity sales (million kWh)	55,760	64,353	64,074	63,366	63,076
Hydroelectric	9,214	10,267	10,318	9,032	8,759
Thermal	46,546	54,086	53,756	54,333	54,316
Water supply rate (%)	96	106	115	102	99
Load factor of coal-fired thermal power plants (%)	68	78	77	78	79

【 Personnel costs 】

(Unit: 100 million yen)

	FY2009	FY2010	FY2011	FY2012	FY2013
Amortization of the actuarial difference in retirement benefits	34	(22)	17	5	(30)
Other personnel costs	327	334	326	335	329
Total	361	312	344	340	298

(Amortization of the actuarial difference)

(Unit: 100 million yen)

	FY2009	FY2010	FY2011	FY2012	FY2013
The remainder in the previous year (c)	49	15	(10)	8	2
Actual difference in the present year	-	-	-	-	-
Actual difference in the previous year	-	(48)	35	(0)	(47)
Subtotal (a)	49	(32)	25	7	(45)
Amortization *(b)	34	(22)	17	5	(30)
The remainder in the present year (c=a-b)	15	(10)	8	2	(14)

* 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

	FY2009	FY2010	FY2011	FY2012	FY2013
Fuel costs (¥ 100 million)	1,739	2,099	2,384	2,384	2,502
Coal consumption (10 thousand ton)	1,814	2,115	2,079	2,103	2,106
Australian coal FOB price* (US\$)	71	97~98	130	115	95
Average exchange rate (¥ /US\$)	92.89	85.74	79.08	82.91	100.17

* Reference Price

【 Repair expenses 】

(Unit: ¥ 100 million)

	FY2009	FY2010	FY2011	FY2012	FY2013
Hydroelectric	80	81	130	113	117
Thermal	332	387	357	404	419
Transmission	23	22	37	31	32
Others	18	14	17	15	15
Total	453	506	542	564	585

【 Depreciation and amortization costs 】

(Unit: 100 million yen)

	FY2009	FY2010	FY2011	FY2012	FY2013
Hydroelectric	240	235	234	218	213
Thermal	693	613	567	484	408
Transmission	177	168	160	153	150
Others	44	43	42	39	42
Total	1,155	1,060	1,004	894	815

(1)-3. Consolidated: Segment Information



(Unit: 100 million yen)

		Electric power	Electric power -related	Overseas	Other	Subtotal	Elimination*	Consolidated
FY2013	Sales	6,107	3,613	428	263	10,412	(3,344)	7,068
	Sales to customers	6,090	299	428	249	7,068	-	7,068
	Ordinary income	290	96	0	9	397	3	400
FY2012	Sales	6,080	3,458	16	247	9,802	(3,242)	6,560
	Sales to customers	6,053	265	16	224	6,560	-	6,560
	Ordinary income	310	90	39	9	450	(2)	448
year-on-year change	Sales	26	155	411	16	610	(102)	507
	Sales to customers	37	33	411	25	507	-	507
	Ordinary income	(20)	5	(38)	(0)	(53)	6	(47)

“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

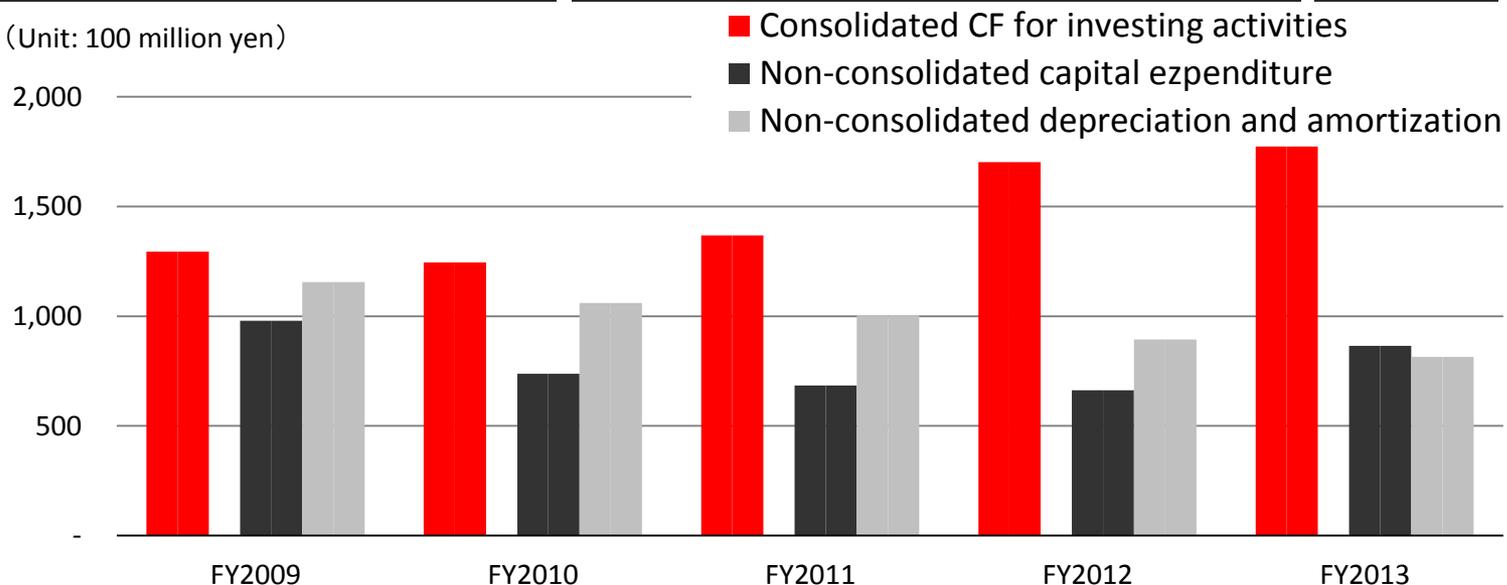
* Elimination includes elimination of intersegment sales

(1)-4. Consolidated: Cash Flow

(Unit: 100 million yen)

	FY2009	FY2010	FY2011	FY2012	FY2013
Operating activities	1,691	1,512	1,258	1,197	1,221
Income before income taxes and minority interests	421	387	332	451	427
(reference) Non-consolidated depreciation and amortization	1,155	1,060	1,004	894	815
Investing activities	(1,295)	(1,246)	(1,368)	(1,703)	(1,773)
Capital expenditure for subsidiaries	(135)	(302)	(642)	(1,002)	(957)
(reference) Non-consolidated CAPEX*	(979)	(737)	(684)	(662)	(865)
Free cash flow	396	265	(109)	(505)	(552)

(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)

	FY2009	FY2010	FY2011	FY2012	FY2013
(PL) Operating revenues	5,844	6,359	6,546	6,560	7,068
Operating income	489	705	498	545	591
Ordinary income	416	563	366	448	400
Net income	291	195	161	298	286
(BS) Total assets	20,240	20,123	20,163	21,699	23,852
Construction in progress	3,097	3,016	3,804	4,646	5,126
Shareholders' equity	4,126	4,157	4,073	4,539	5,162
Net assets	4,149	4,148	4,061	4,538	5,194
Interest-bearing debts	14,525	14,290	14,357	15,230	16,499
(CF) Investing activities	(1,295)	(1,246)	(1,368)	(1,703)	(1,773)
Free cash flow	396	265	(109)	(505)	(552)
(Ref) Non-consolidated CAPEX*1	(979)	(737)	(684)	(662)	(865)
(Ref) Non-consolidated depreciation	1,155	1,060	1,004	894	815
ROA (%)	2.1	2.8	1.8	2.1	1.8
ROA (ROA excl. Construction in progress) (%)	2.5	3.3	2.2	2.7	2.2
ROE (%)	7.4	4.7	3.9	6.9	5.9
EPS (¥)	194.26	130.51	107.39	198.65	191.23
BPS (¥)	2,750.20	2,770.77	2,714.94	3,024.98	3,440.23
Shareholders' equity ratio (%)	20.4	20.7	20.2	20.9	21.6
D/E ratio	3.5	3.4	3.5	3.4	3.2
Number of shares issued*2 (thousand)	150,053	150,053	150,052	150,052	150,051

*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. 2012 – Mar. 2013 Results (Cumulative)

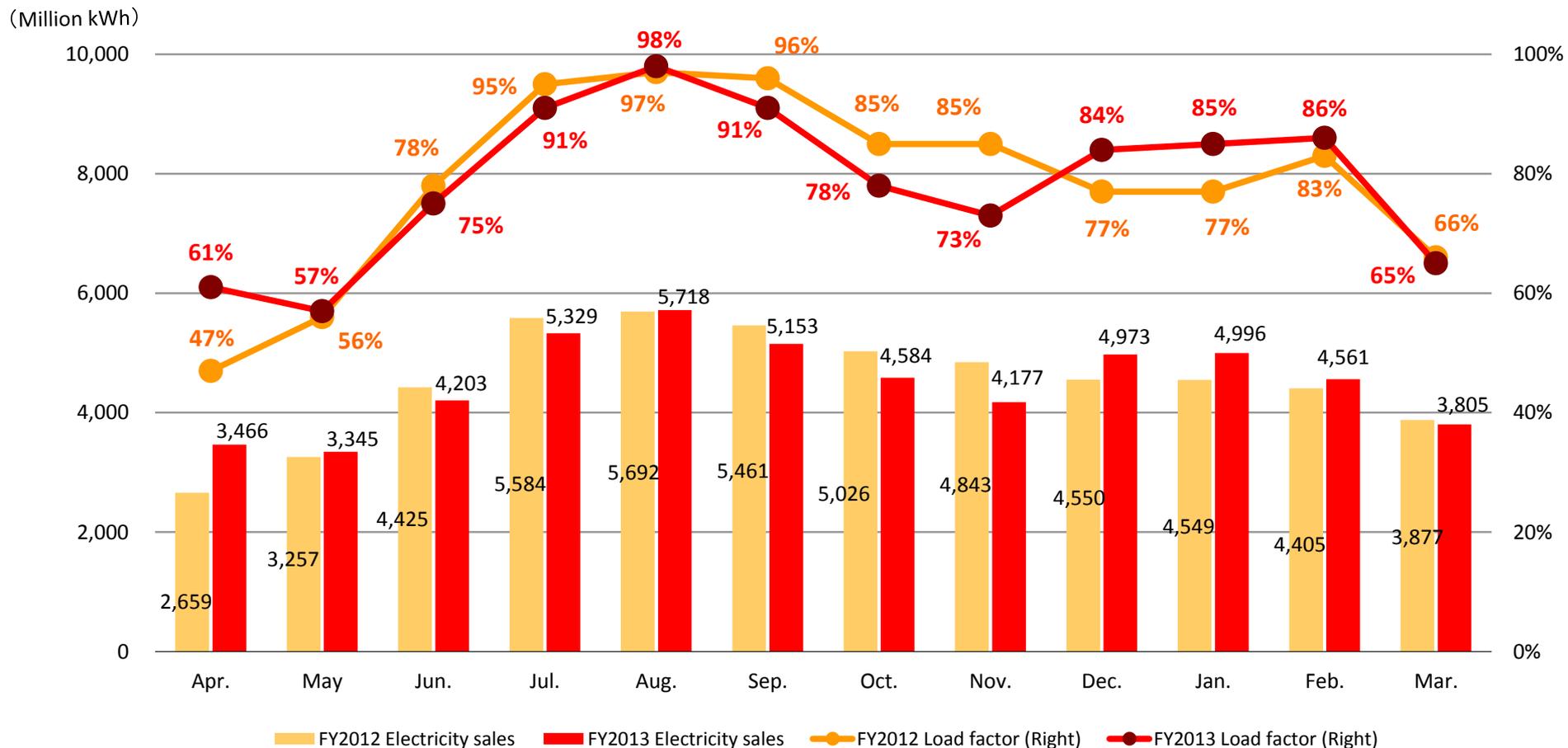
Load factor ⇒ 78%

Electricity sales ⇒ 54.3B kWh

▶ Apr. 2013 – Mar. 2014 Results (Cumulative)

Load factor ⇒ 79%

Electricity sales ⇒ 54.3B kWh

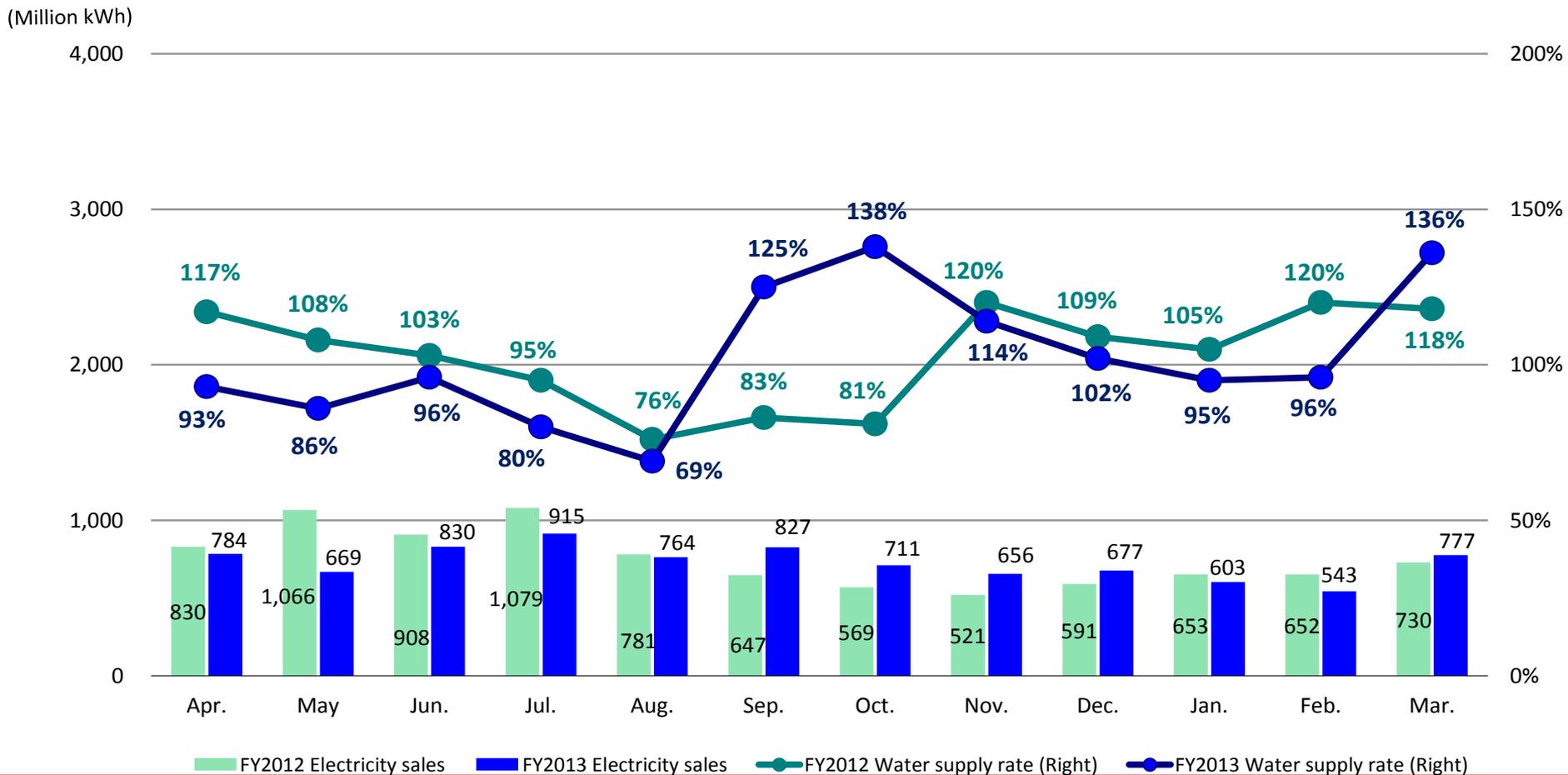


(1)-6. Monthly Electricity Sales:

Wholesale Electric Power Business (Hydroelectric Power)

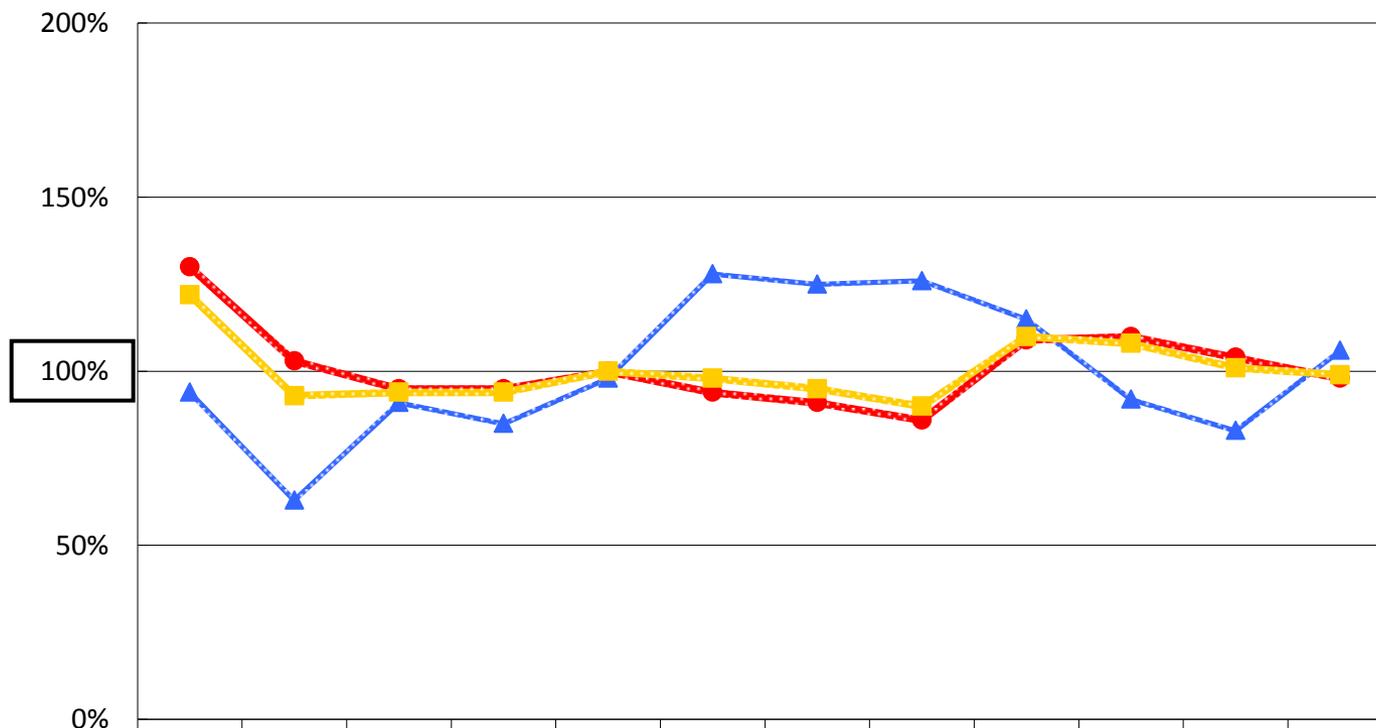


▶ Apr. 2012 – Mar. 2013 Results (Cumulative)	▶ Apr. 2013 – Mar. 2014 Results (Cumulative)
Water supply rate ⇒ 102%	Water supply rate ⇒ 99%
Electricity sales ⇒ 9.0B kWh	Electricity sales ⇒ 8.7B kWh



(1)-6. Monthly Electric Power Business:

Change in Monthly Electricity Sales

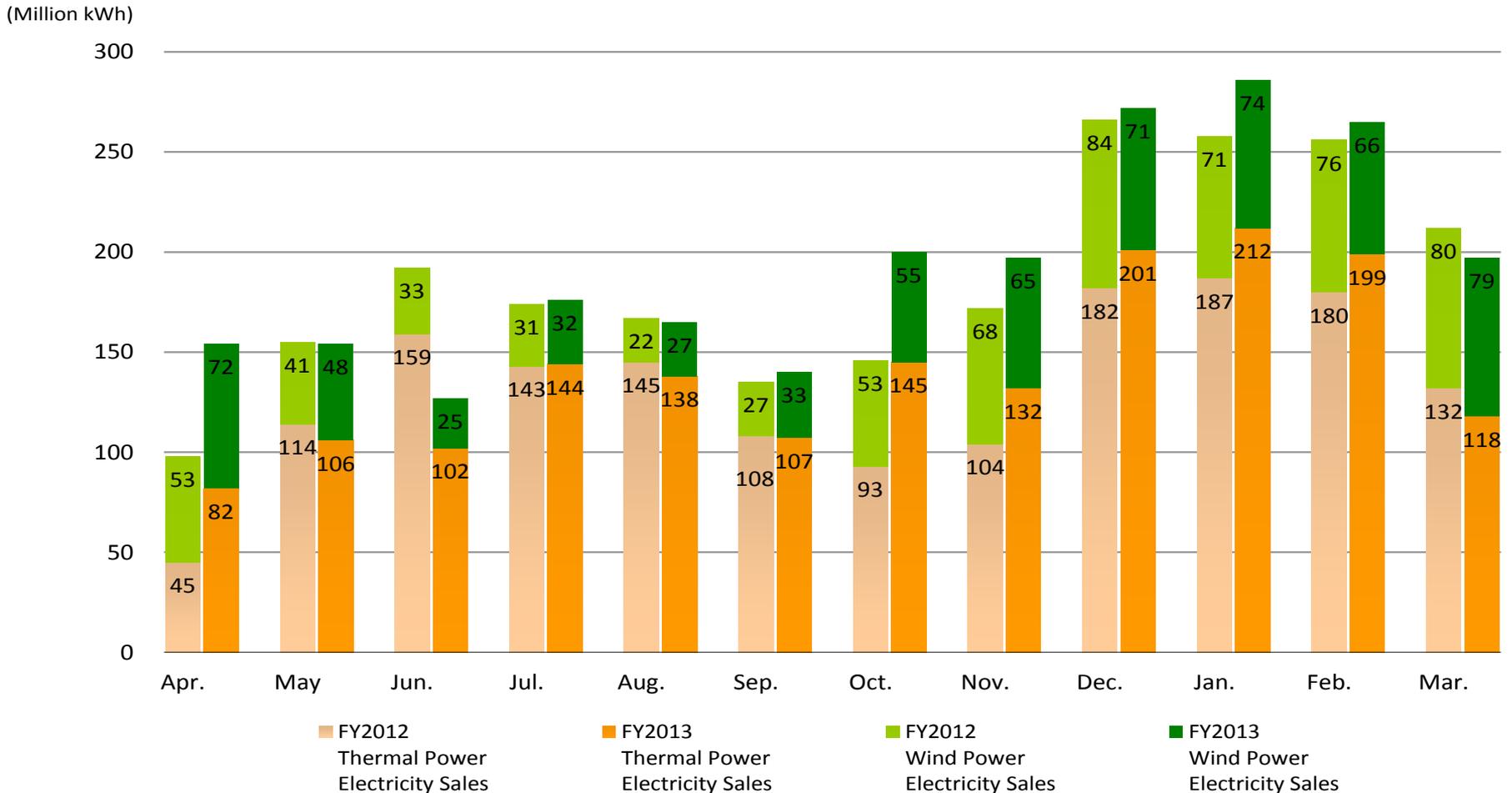


	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. - Mar.
Year-on-year (Hydro)	94%	63%	91%	85%	98%	128%	125%	126%	115%	92%	83%	106%	97%
Year-on-year (Thermal Power)	130%	103%	95%	95%	100%	94%	91%	86%	109%	110%	104%	98%	100%
Year-on-year Total	122%	93%	94%	94%	100%	98%	95%	90%	110%	108%	101%	99%	100%

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



- ▶ Apr. 2012 - Mar. 2013 Results (Cumulative) ⇒ 2.2B kWh
- ▶ Apr. 2013 - Mar. 2014 Results (Cumulative) ⇒ 2.3B kWh

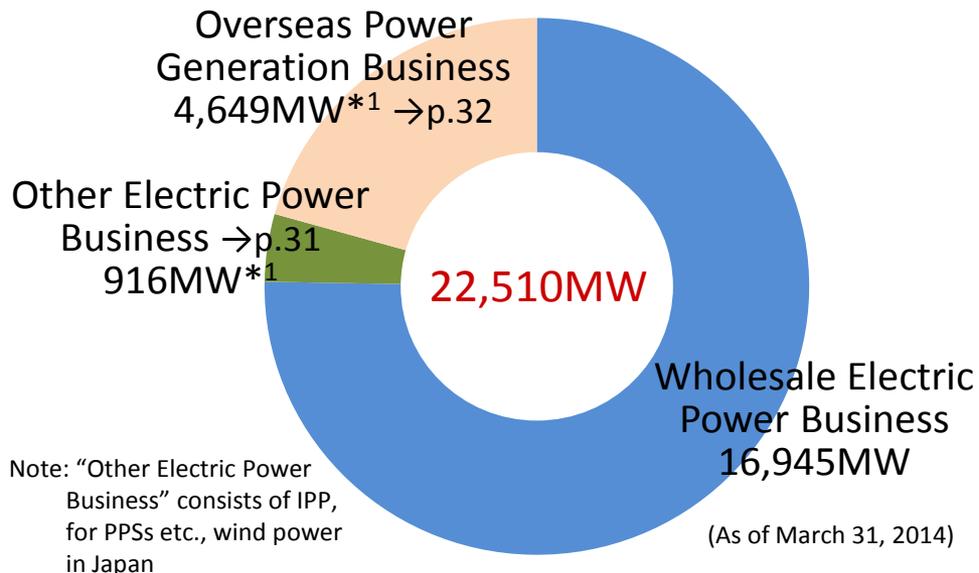


* Does not take proportion of equity holdings into account

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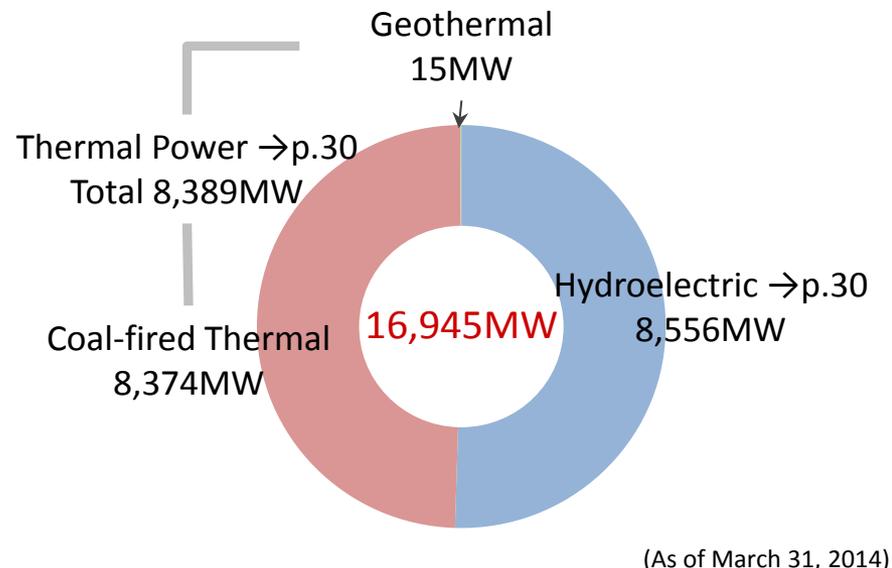
(2)-1. Overview of J-POWER Group Power Generation Facilities

Consolidated Power Generation Capacity

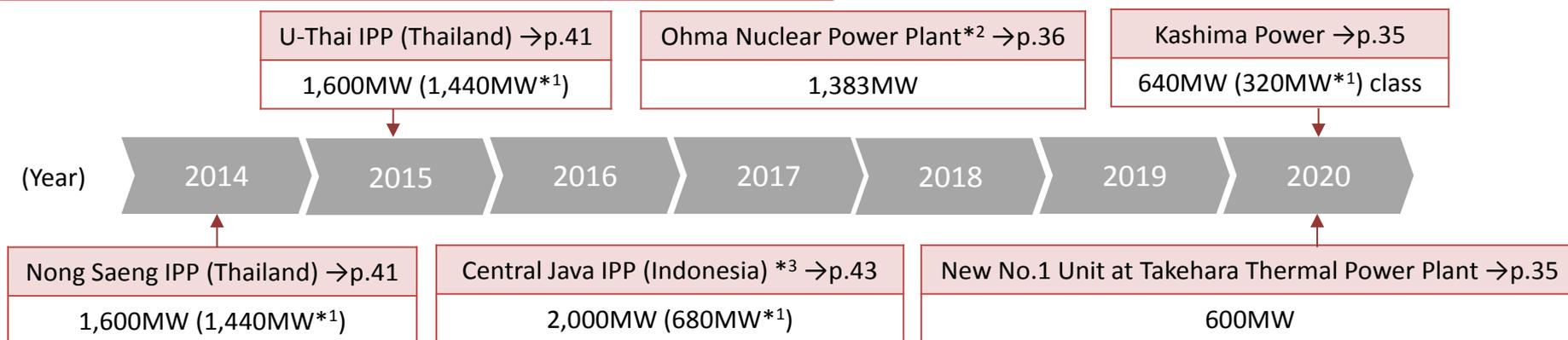


Note: "Other Electric Power Business" consists of IPP, for PPSs etc., wind power in Japan

Breakdown of Wholesale Electric Power Business



Major Large-scale Projects under Development



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

*3 Delayed from its original schedule to commence construction due to delay of obtaining necessary land for the project.

(2)-2. Wholesale Electric Power Business Facilities (As of March 31, 2014)

Thermal: 8 power plants, 8,389MW

	Power plants (Location)		Beginning of operation	Capacity (MW)
Coal	Isogo (Kanagawa)	New No.1	2002	600
		New No.2	2009	562*1
	Takasago (Hyogo)	No.1	1968	250
		No.2	1969	250
	Takehara*2 (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*2 (Nagasaki)	No.1	1990	1,000
		No.2	1997	1,000
	Ishikawa Coal (Okinawa)	No.1	1986	156
		No.2	1987	156
	Total			8,374
Geo-thermal	Onikobe (Miyagi)		1975	15

Hydroelectric: 58 power plants, 8,556MW

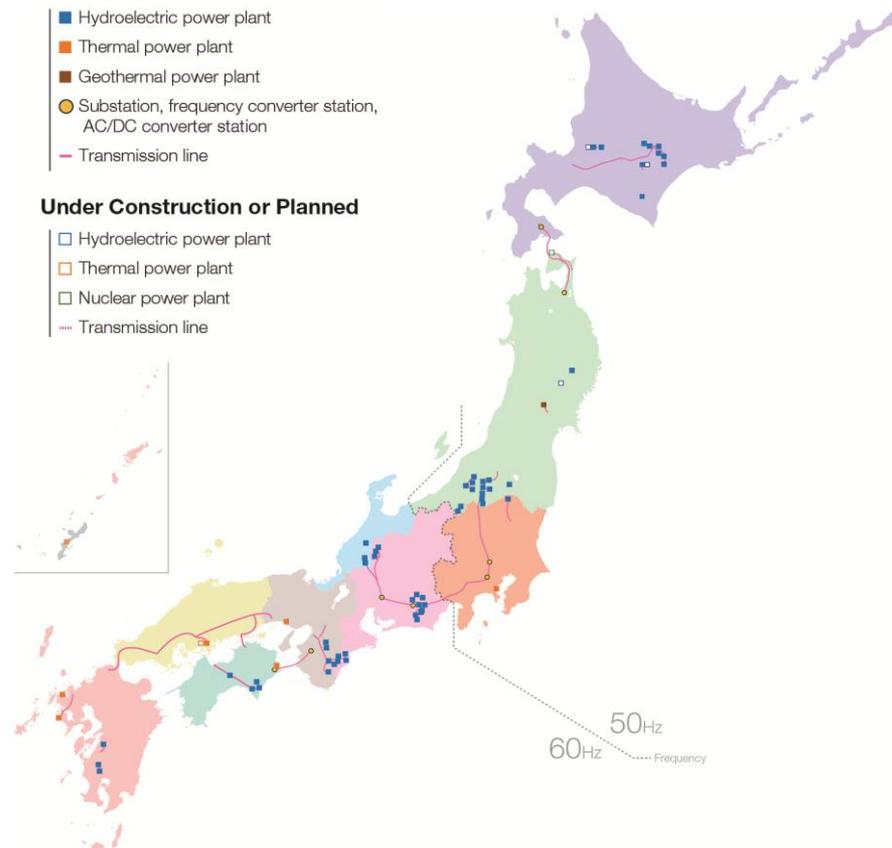
Types	Number of power plants	Capacity (MW)
Conventional	51	3,586
Pumped storage	7	4,970

Facilities

- Hydroelectric power plant
- Thermal power plant
- Geothermal power plant
- Substation, frequency converter station, AC/DC converter station
- Transmission line

Under Construction or Planned

- Hydroelectric power plant
- Thermal power plant
- Nuclear power plant
- Transmission line



*1 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 Biomass fuels (sewage sludge, etc.) ,supplied by J-POWER's affiliated companies, are burned as an admixture to coal.

(2)-3. Other Electric Power Business Facilities (As Of March 31, 2014)

IPP, for PPS etc.: 6 power plants, 548MW*

(Capacity unit: MW)

Power plants	Location	Fuel	Ownership	Output capacity
IPP				
Itoigawa	Niigata	Coal	80%	134
Tosa	Kochi	Coal	45%	150
Genex Mizue	Kanagawa	Gas oil Residue	40%	238
Subtotal				522

Power plants	Location	Fuel	Ownership	Output capacity
For PPSs etc.				
Bayside Energy Ichihara	Chiba	Gas	100%	108
Mihama Seaside Power Shinminato	Chiba	Gas	100%	105
Ichihara Power	Chiba	Gas	60%	110
Subtotal				322

Wind Power: 19 wind farms, 368MW*

(Capacity unit: MW)

Wind farms	Location	Ownership	Output capacity
Sarakitomanai	Hokkaido	100%	14.9
Tomamae Winvilla	Hokkaido	100%	30.6
Shimamaki	Hokkaido	100%	4.5
Setana Seaside	Hokkaido	100%	12.0
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
Tokyo Bayside	Tokyo	100%	1.7

Wind farms	Location	Ownership	Output capacity
Irouzaki	Shizuoka	100%	34.0
Tahara Bayside	Aichi	100%	22.0
Tahara	Aichi	100%	2.0
Awara-Kitagata	Fukui	100%	20.0
Yokihi-no Sato	Yamaguchi	100%	4.5
Aso-Nishihara	Kumamoto	100%	17.5
Aso-Oguni	Kumamoto	100%	8.5
Nagasaki-Shikamachi	Nagasaki	70%	15.0
Minami Oosumi	Kagoshima	99%	26.0
Total			380.9

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

(2)- 4. Overseas Power Generation Projects (As of March 31, 2014)



Projects	Type	Output capacity (MW)	Ownership	Owned capacity (MW)	Power purchaser	Validity of purchase agreement
Thailand (14 projects)		2,747		1,608		
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	CCGT*3	790	86.6%	684	EGAT*1/ Companies in the industrial park	Valid to 2038
United States (10 projects)		4,494		1,442		
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)- 4. Overseas Power Generation Projects (As of March 31, 2014)



Projects	Type	Output capacity (MW)	Ownership	Owned capacity (MW)	Power purchaser	Validity of purchase agreement
China (5 projects)		8,513		905		
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*1 every year
Gemeng*2	Mainly Coal	5,923	7%	416	Shanxi Province Power Corporation	-
Hezhou	Coal	2,090	17%	355	Guanxi Power Grid Co.	Renewed*1 every year
Other country/region (6 projects)		2,196		693		
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
Nhon Trach 2 (Vietnam)	CCGT*3	750	5%	38	Vietnam Electricity	*4

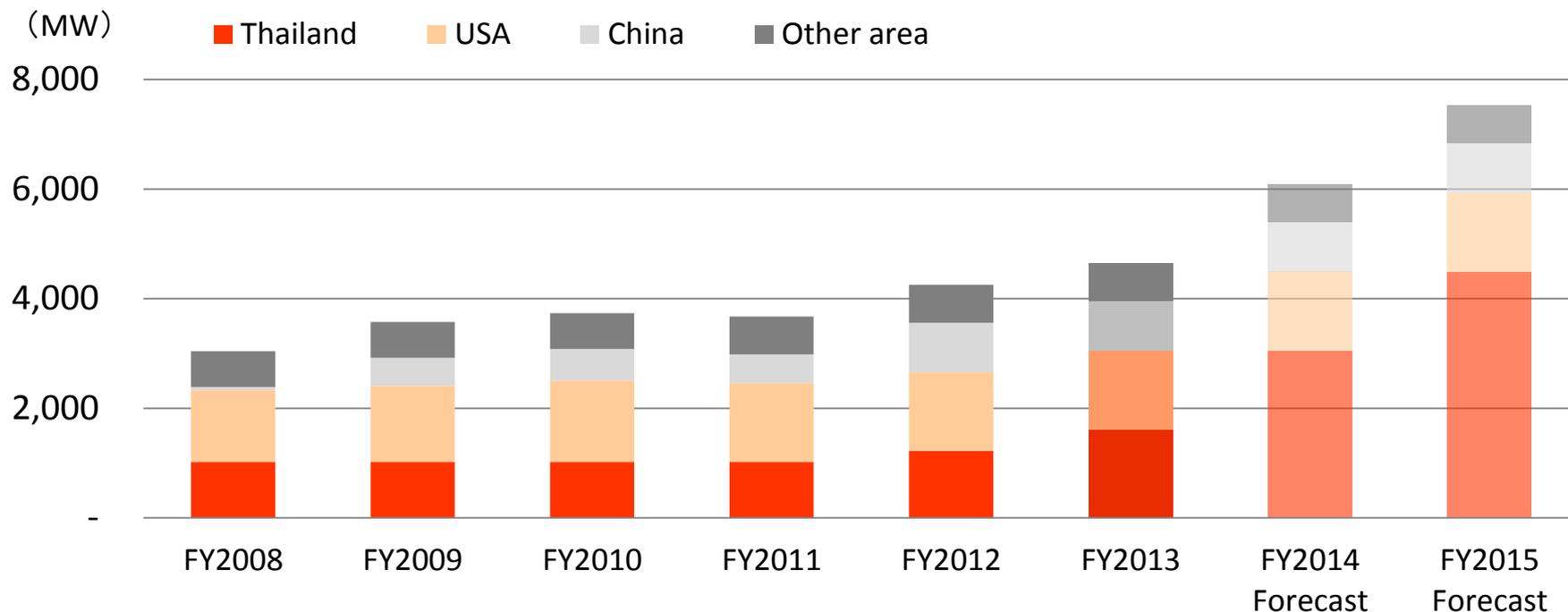
*1 Although power purchase agreements are renewed every year, J-POWER makes other agreements with power purchasers for continuous power purchase during the plant operation.

*2 Gemeng International Energy Co., Ltd. is an electric power company that owns 15 power generation companies.

*3 CCGT: Combined Cycle Gas Turbine

*4 The agreement is under negotiation.

(2)- 4. Overseas Power Generation Projects (As of March 31, 2014)



[Owned capacity]

(Unit: MW)

Countries/ Resions	In operations	Under development	Total
Thailand	1,608	2,880	4,488
USA	1,442	-	1,442
China	905	-	905
Other areas	693	680	1,373
Total	4,648	3,560	8,208

[Overseas projects under development]

(Unit: MW)

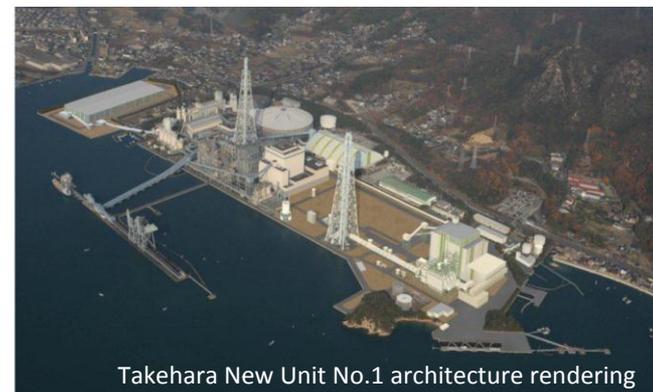
Project name	Output capacity	Ownership	Owned capacity
Nong Saeng	1,600	90%	1,440
U-Thai	1,600	90%	1,440
Central Java	2,000	34%	680
Total	5,200	-	3,560

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

Contributing to mid to long term stable power supply while securing base load capacity by replacement and installation of new or additional capacity.

Takehara Thermal Power Plant New Unit No.1 (Replacement)

Location	Takehara-city, Hiroshima prefecture		
Units	No.1	No.2*1	No.3
Start of operation	1967	1974	1983
Capacity	250MW	350MW	700MW
Steam condition	Sub-critical		Supercritical

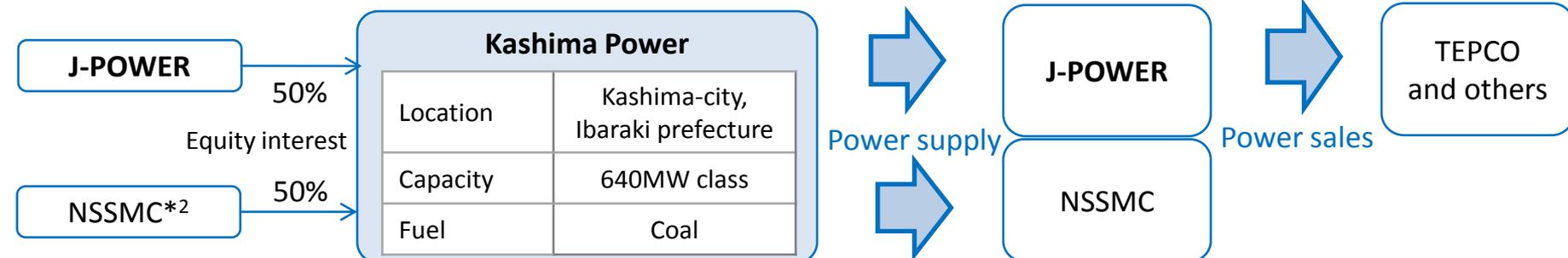


Unit	New No.1
Capacity	600MW
Steam condition	Ultra-supercritical

- ✓ Renewal of aging facilities
- ✓ Lower carbon emission by improving energy efficiency
- ✓ Reducing the environmental impact of SOx, NOx and particulate matter



Kashima Power (New Capacity)



*1 Converted from heavy oil-fueled boiler to coal-fired fluidized boiler in 1975

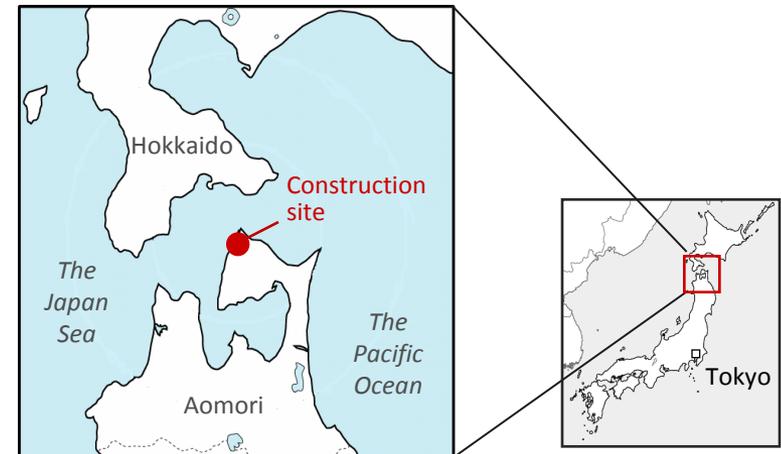
*2 Nippon Steel & Sumitomo Metal Corporation

(2)-6. Ohma Nuclear Power Project

- ▶ In October 2012, we resumed construction of Ohma Nuclear Power Plant that had been suspended after the Great East Japan Earthquake of March 2011.
- ▶ J-POWER is committed to building a safe power plant by making a company-wide effort in the steady implementation of safety enhancement measures which takes into account the latest developments in the field and the New Safety Standard for Nuclear Power Stations set forth by the Nuclear Regulation Authority.

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)

Construction Commenced in May

Construction Resumed in October

(Year) 2008 2009 2010 2011 2012 2013 2014

April Obtained permission to install nuclear reactor

March Construction work suspended due to Great East Japan Earthquake Disaster



- ▶ For Ohma Nuclear Power Plant, in addition to the previous safety enhancement measures, we are complying with the New Safety Standard for Nuclear Power Stations (effective July 8, 2013), and implementing further safety enhancement measures to further improve safety of the power plant.
- ▶ We are reviewing active implementation of superior safety technologies and will appropriately incorporate necessary measures towards building a safe power plant.

Measures for Reinforcing Safety that are being Planned*

Design Basis

- ① Facility protection in the case of a tsunami (installation of seawall, waterproofing modification of doors in exterior walls, height extension of oil fences and improvement in the watertightness of important rooms for safety purposes)
- ② Implementation of impact assessments of tornadoes and other natural phenomena on the nuclear power plant
- ③ Enhanced fire protection measures (use of fire retardant cables, installation of firewalls, and other measures)
- ④ Installation of power panels on upper floor for locational dispersion
- ⑤ Enhanced reliability of passive component (such as ventilation filters) that are crucial to safety
- ⑥ Implementation of impact assessments of internal flooding on the safety system

Severe Accident and Terrorism Countermeasures

- ⑦ Deployment of portable power pumps and fire engines for cooling the reactor, containment vessel and spent fuel storage pool
- ⑧ Reinforcement of alternative water injection equipment for cooling the reactor, containment vessel and spent fuel storage pool
- ⑨ Installation of filtered containment venting system to prevent overpressurization on the containment vessel
- ⑩ Installation of hydrogen detection units and hydrogen discharge venting units to prevent hydrogen explosion at the reactor building
- ⑪ Deployment of water spraying facilities to spray water on the reactor building and other facilities
- ⑫ Secure inventory of spares of seawater pump electric motors, etc. and deployment of alternative seawater pumps and other equipments to ensure heat removal functionality for the reactor and containment vessel
- ⑬ Deployment of power supply vehicles, installation of emergency power generators (fuel tanks and power cables), increased capacity of storage batteries and enhancement of permanent DC power source to secure power supply
- ⑭ Installation of water storage tanks and reinforcement of water tanks to secure water source
- ⑮ Installation of a seismic isolation building which houses the emergency response office to respond as necessary in an emergency
- ⑯ Reinforcement of communications systems for making contact within and outside of the power plant in the event of an emergency
- ⑰ Installation of materials and equipment warehouse, provision of high-level radiation protection suits and other materials and equipment, and deployment of heavy equipment for debris removal
- ⑱ Installation of specified severe accident response facility to respond to intentional crash of aircrafts and other such events

Aside from the above measures, we will be reinforcing links and collaboration between businesses operating in Aomori prefecture* to further ensure disaster prevention. * Tohoku Electric Power Company, Tokyo Electric Power Company, J-POWER, Japan Nuclear Fuel Limited and Recyclable-Fuel Storage Company

(2)-8. Earthquake and Tsunami Evaluation at Ohma Nuclear Power Plant

Ohma Nuclear Power Plant has undergone detailed geological surveys based on the earthquake-proof design guidelines that were revised in September 2006*1 and have obtained a nuclear reactor installation permit in April 2008. Construction work commenced in May of that year.

■ Earthquake

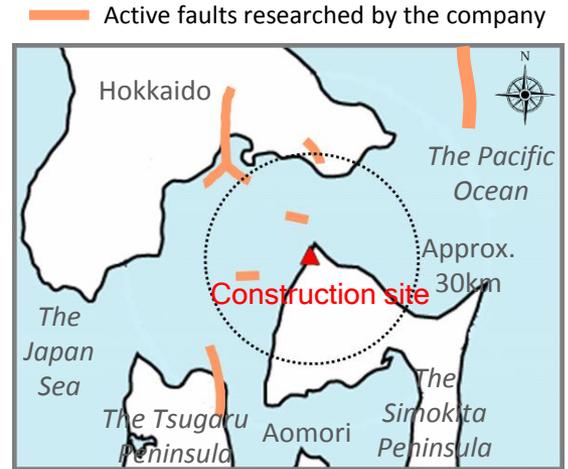
- ✓ Researched impacting earthquakes in the past within a 250km radius from the site.
- ✓ 30km radius range from the site: Implemented detailed geological surveys centered on the active faults since the late Pleistocene period (after ca. 120 to 130 thousand years ago)
- ✓ Based on research results, designed nuclear reactor facilities that considers safety margins against datum design basis earthquake Ss, which is set with consideration to uncertainty.

■ Tsunami

- ✓ Site elevation is 12m above sea level

Estimated maximum height of potential tsunami	+4.4m above sea level*2
Tsunami from the Tohoku Pacific Ocean Earthquake (Ohma Port)	+0.9m above sea level

[After the Great East Japan Earthquake] As part of measures for reinforcing safety, implemented further Tsunami countermeasures such as seawalls that is 3m in height, and waterproofing of doors in exterior walls in main buildings



*2 A value based on numerical analysis of a tsunami assumption with the gravest impact to a power plant (with its wave source in the eastern fringes of the Japan Sea). This assumption was derived by reviewing tsunamis that are assumed to have occurred in the Eastern fringes of the Japan sea, along the Japan Trench or off the coast of Chile. This value also includes uncertainty factors.

- ▶ After obtaining the permit, we are continuing independently engage in obtaining exhaustive data from research and analysis using the latest technologies and methods to further improve reliability related to earthquake and tsunami evaluations.

[Research that is in progress or completed]

- Microtopography surveys, marine terrace surface surveys, airborne gravity surveys, marine sonic prospecting of western Shimokita Peninsula
- Tsunami sediment investigation of the northwestern coast of western Shimokita Peninsula and the western coast of Tsugaru Peninsula
- Geological surveys within the site and near the site (seismic exploration, core drilling, trenching, etc.)

- ▶ In the future, we will pay close attention to trends in new safety standards and deliberations by the Nuclear Regulation Authority and carry out appropriate reviews, investigations, analysis and evaluations.

*1 The earthquake in Southern Hyogo prefecture in 1995 was the impetus for revision of the Earthquake-proof Design Inspection Guidelines related to Nuclear Reactor Facilities for Power Plants (Earthquake-proof Design Guidelines) and safety standards were enhanced as of September 2006.

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

Large-scale demonstration test on oxygen-blown IGCC and IGFC, CO₂ 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)
Scale	166MW (Coal consumption: 1,180t/day-class)



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

7 SPP*1

Capacity: 790MW
(110MW x 5)
(120MW x 2)
Type: CCGT*2

- Projects based on the SPP Program*1 of the Thai Government
- Development of seven 100MW-class cogeneration power plants
- 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)
- J-POWER holds a 90% stake in 6 plants and a 67.5% stake *4 in a plant.

11/2009	Signed the PPAs
10/2010	Signed the loan agreements
01/2013	COD*5 of the first of the seven projects
10/2013	COD*5 of the last of the seven projects

Nong Seang IPP

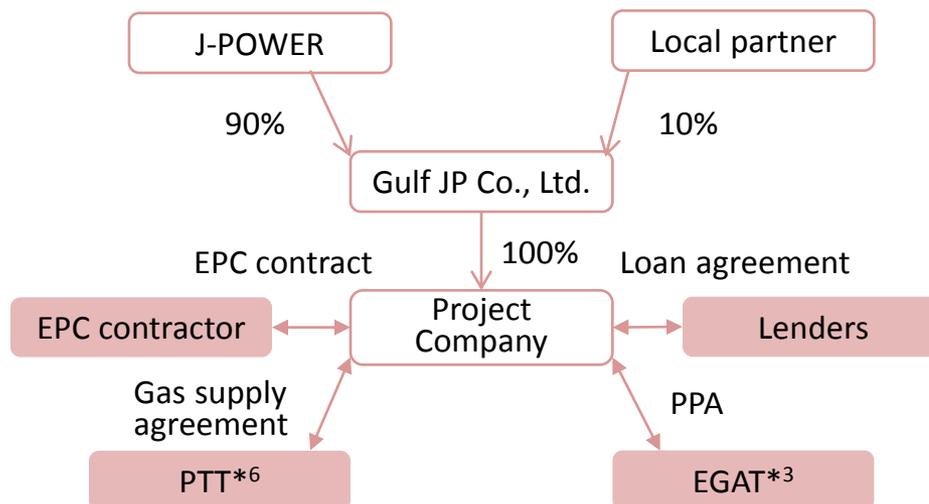
Capacity: 1,600MW
(800MW x 2 units)
Type: CCGT*2

- After startup of operations, the plants will sell electricity to EGAT*3 for a period of 25 years.

12/2007	Awarded in an international tender
10/2008	Signed the PPA
11/2011	Signed the loan agreements
06/2014	COD*5 of the 1st block
12/2014	COD*5 of the 2nd block

U-Thai IPP

Capacity: 1,600MW
(800MW x 2 units)
Type: CCGT*2



12/2007	Awarded in an international tender
10/2008	Signed the PPA
11/2012	Signed the loan agreements
06/2015	COD*5 of the 1st block
12/2015	COD*5 of the 2nd block

*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 on 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)

Nong Saeng IPP (2014, 99%)



NK2 (Oct. 2013, in operation)



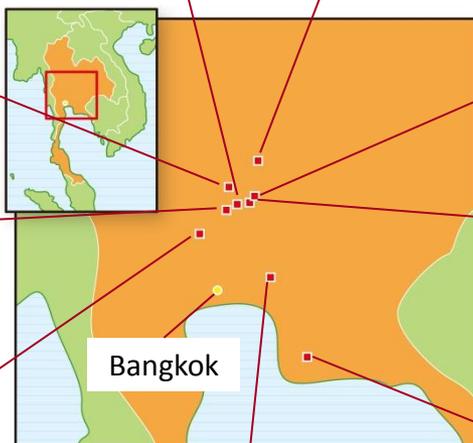
TLC (Mar. 2013, in operation)



KP2 (Feb.2013, in operation)



U-Thai IPP (2015, 67%)



KP1 (Jan.2013, in operation)



CRN (Jul. 2013, in operation)



NNK (Apr. 2013, in operation)



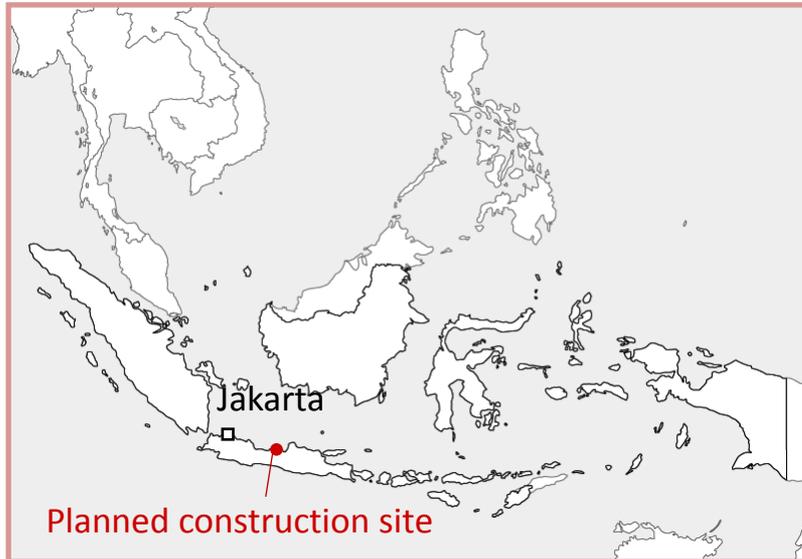
NLL (May 2013, in operation)



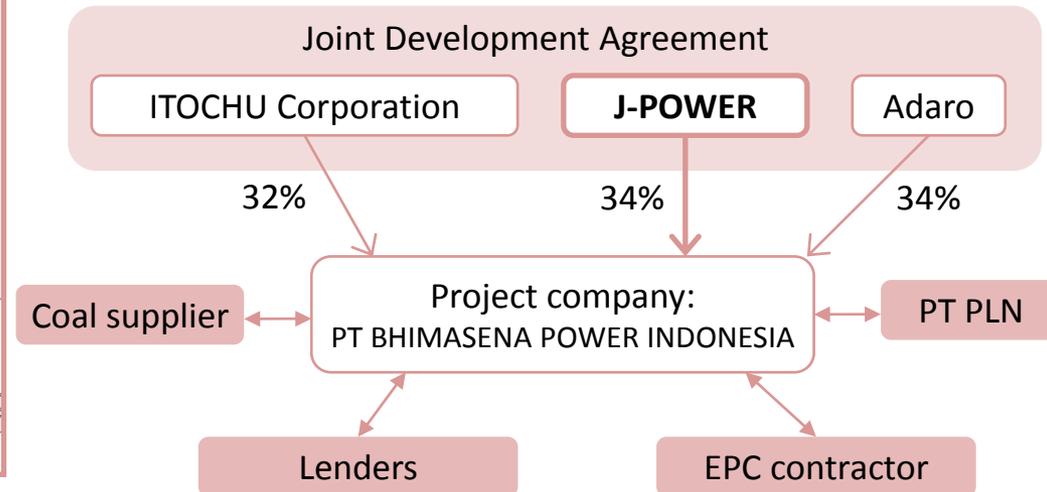
(2)-11. Central Java IPP Project in Indonesia

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"> • IPP project (newly developed coal-fired power plant) awarded through international tender in Indonesia in 2011. • The plan is to construct a high-efficiency coal-fired power plant on the island of Java. • 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. 	✓ Delayed from its original schedule to commence construction due to delay of obtaining necessary land for the project.

*USC: Ultra -Supercritical



Outline of the scheme



(2)-12. Renewable Power Projects under Development

Hydroelectric: 3 power plants, 31.47MW

Power plants	Location	Output Capacity(MW)	Start of operation	Status
Isawa No.1	Iwate	14.2	Jul. 2014	Under construction
Kuttari	Hokkaido	0.47	Apr. 2015	Under construction
Shinkatsurazawa	Hokkaido	16.8	Jun. 2020	Under preparation of construction

Wind Power: 1 wind firm, 20MW

Wind farms	Location	Ownership	Output Capacity(MW)	Start of operation	Status
Minami Ehime (Tentative name)	Ehime	100%	20	Sep. 2014	Under construction

Geo-thermal: 1 power plant, 42MW

Power plant	Location	Ownership	Output Capacity(MW)	Start of operation	Status
Wasabizawa (Tentative name)	Akita	50%	42	May. 2019	In the process of environmental impact assessment

(2)-13. Coal Mine Projects in Australia

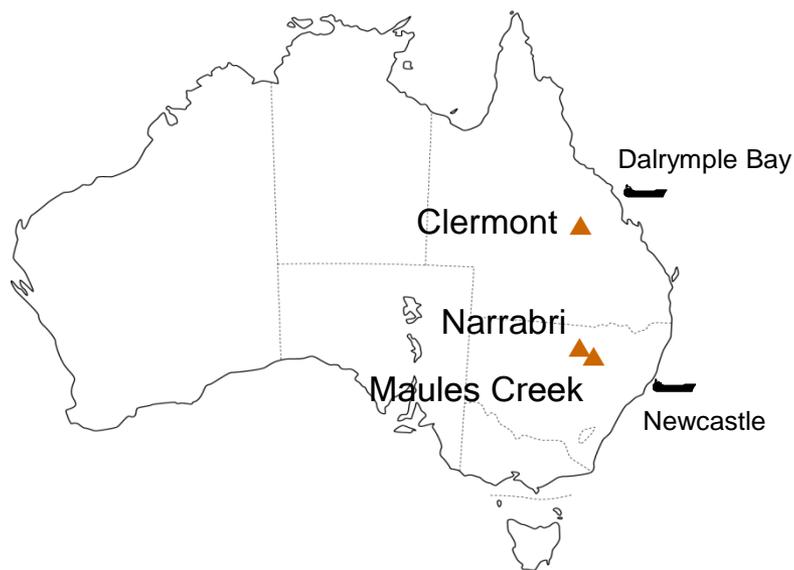
Coal Mine Projects

Coal mine	Location	Loading port	Production volume in 2012* ¹	Ownership* ²	Start of commercial production
Clermont	Queensland	Dalrymple Bay	12.01 Million t (Approx. 12 million t/yr)	15%	2010
Narrabri	New South Wales	Newcastle	4.98 Million t (Approx. 6 million t/yr)	7.5%	2010
Maules Cleek	New South Wales	Newcastle	— (Approx. 10.7 million t/yr)	10%	2015 (scheduled)

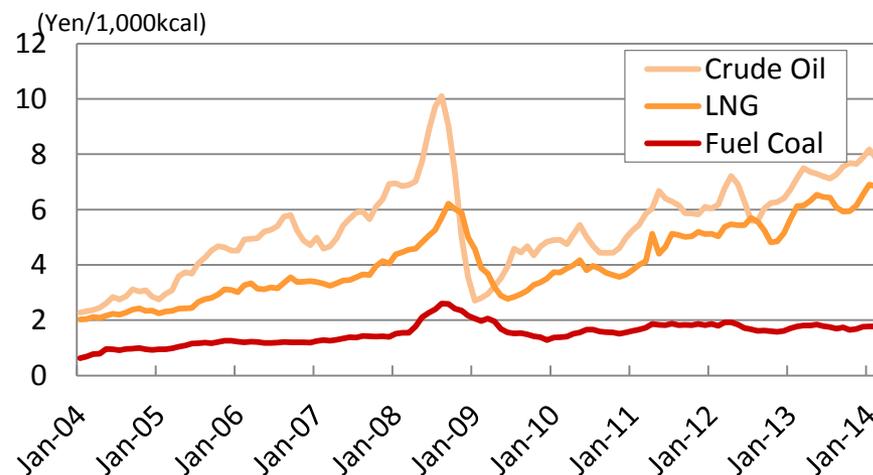
*1 The production volumes in parentheses represent figures for anticipated peak production.

*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 2014
Source: The Institute of Energy Economics, Japan



電源開発株式会社

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