The English version is a translation of the original Japanese version. Please note that if there is any discrepancy, the Japanese version will take priority.

# Summary of FY2016 Third Quarter Earnings Results



Electric Power Development Co., Ltd.

January 31, 2017



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 appropriateness.

#### **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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#### \*Inclusion of Loan Interest in Asset Acquisition Cost

The Company included the interest on funds allocated to build electric utility plant and equipment in the construction cost for the assets concerned, pursuant to the Electricity Utilities Industry Accounting Regulations (MITI Ministerial Ordinance No. 57, 1965), but has switched to an accounting method that does not include interest in the construction cost of the assets concerned from the first quarter of the current fiscal year. This accounting policy was applied retroactively, and the consolidated financial statements and quarterly consolidated financial statements for the previous fiscal year reflect the retroactive application.



(Unit: billion yen)

Consolidated	FY2015 3rd Quarter (AprDec.)	FY2016 3rd Quarter (AprDec.)	Year-on-year change
Operating Revenue	578.8	530.9	(47.8) (8.3) %
Operating Income	77.7	70.9	(6.8) (8.8) %
Ordinary Income	55.1	63.2	8.1 14.8 %
Profit attributable to owners of parent	39.4	44.5	5.0 12.9 %
Non-consolidated	FY2015 3rd Quarter (AprDec.)	FY2016 3rd Quarter (AprDec.)	Year-on-year change
Operating Revenue	418.5	382.2	(36.2) (8.7) %
Operating Income	46.6	36.9	(9.6) (20.8) %
Ordinary Income	43.6	69.0	25.3 58.0 %
Profit	33.3	60.3	27.0 81.0 %
Growth indicator	FY2015 3rd Quarter (AprDec.)	FY2016 3rd Quarter (AprDec.)	Year-on-year change

\*1 J-POWER EBITDA = Operating income + Depreciation and amortization + Share of profit of entities accounted for using equity method

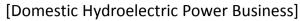


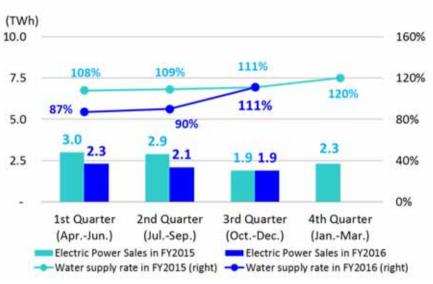
	FY2015 3rd Quarter (AprDec.)	FY2016 3rd Quarter (AprDec.)	Year-on-year change
Electric Power Sales (TWh)			
Electric Power Business	49.9	46.6	(3.2) (6.6)%
Hydroelectric Power	7.9	6.5	(1.3) (17.6)%
Thermal Power	41.4	39.5	(1.9) (4.6)%
Wind Power	0.5	0.5	0.0 4.1%
Overseas Business*1	9.6	11.3	1.6 17.5%
Water supply rate	109%	93%	(16)points
Load factor *2	78%	74%	(4)points

\*1 Electric power sales volume of overseas consolidated subsidiaries (Electric power sales volume of equity method affiliated companies is not included.)

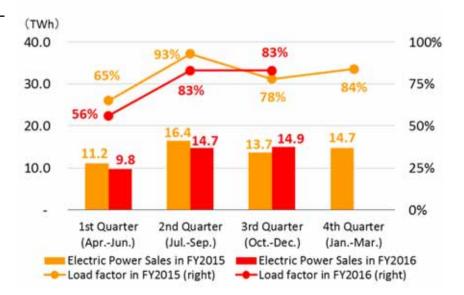
\*2 Load factors of thermal power show the results for non-consolidated only.

#### **Electric Power Sales for each Quarter**





#### [Domestic Thermal Electric Power Business]

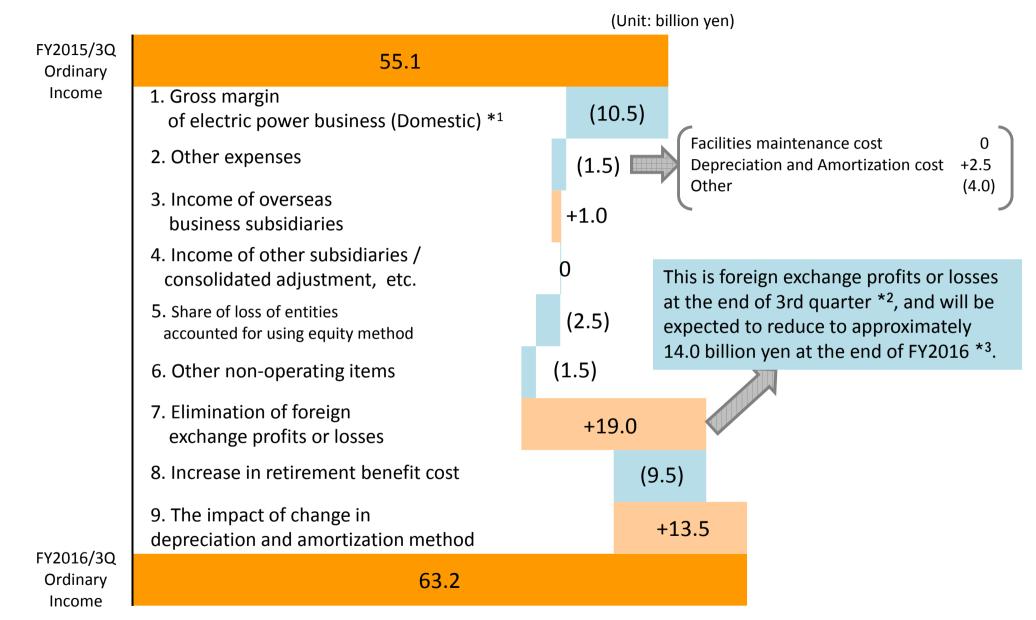




	FY2015 3rd Quarter (AprDec.)	FY2016 3rd Quarter (AprDec.)	Year-or char	-
Operating Revenue (Billion yen)	578.8	530.9	(47.8)	(8.3)%
Electric Power Business	431.0	392.9	(38.0)	(8.8)%
Electric Power Generation Business	392.6	354.4	(38.2)	(9.7)%
Transmission / Transformation Business	36.7	36.7	0.0	0.1%
Overseas Business <sup>*1</sup>	110.9	103.3	(7.6)	(6.9)%
Other Business <sup>*2</sup>	36.8	34.6	(2.1)	(5.9)%
Average foreign exchange rate (Yen/US\$)	121.74	106.60		
Foreign exchange rate as of September 30 (Yen/THB)	3.29	2.91		
Foreign exchange rate as of September 30 (THB/US\$)	36.37	34.70		

\*1 Sales for the overseas business segment (Sales from overseas consolidated subsidiaries and overseas consulting business, etc.) \*2 "Other Business" is composed of "Electric Power-Related Business" segment and "Other Business" segment.





\*1 Gross margin of electric power business (Domestic) : Domestic electric power business revenue (hydro, thermal and wind, excluding transmission) – Fuel costs, etc.

\*2 Calculation based on the foreign exchange rate (Thailand Bahts /US Dollars) at the end of September, 2016

\*3 Calculation based on the foreign exchange rate (Thailand Bahts /US Dollars) at the end of December, 2016



(Unit: billion yen)

	FY2015 3rd Quarter (AprDec.)	FY2016 3rd Quarter (AprDec.)	Year-on-year change	Main factors for change
Operating Revenue	578.8	530.9	(47.8)	
Electric power business	431.0	392.9	(38.0)	Non-consolidated (37.2) (Decrease in fuel price and electric power sales)
Overseas business	110.9	103.3	(7.6)	
Other business	36.8	34.6	(2.1)	
Operating Expenses	501.0	460.0	(41.0)	
Operating Income	77.7	70.9	(6.8)	Non-consolidated (9.6), Subsidiaries and others +2.8
Non-operating Revenue	15.9	17.8	1.8	
Share of profit of entities accounted for using equity method	10.8	8.2	(2.5)	
Foreign exchange profits	-	5.4	5.4	
Other	5.0	4.0	(1.0)	
Non-operating Expenses	38.6	25.4	(13.1)	
Interest expenses	22.5	21.4	(1.0)	
Foreign exchange losses	13.6	-	(13.6)	
Other	2.4	4.0	1.5	
Ordinary Income	55.1	63.2	8.1	Non-consolidated +25.3 (Dividend income from subsidiaries and others : +32.1)
Profit attributable to owners of parent	39.4	44.5	5.0	



				(Unit: billion yen)
	FY2015 End of FY	FY2016 End of 3Q	Change from prior year end	Main factors for change
Noncurrent Assets	2,232.2	2,185.6	(46.6)	
Electric utility plant and equipment	948.2	955.3	7.0	Non-consolidated +0.3, Subsidiaries and others +6.6
Overseas business facilities	357.4	301.7	(55.6)	Subsidiaries including power generation projects in Thailand (55.6)
Other noncurrent assets	101.8	87.4	(14.3)	
Construction in progress	441.0	466.0	24.9	Non-consolidated +33.6, Subsidiaries and others (8.6)
Nuclear fuel	73.4	73.5	0.0	
Investments and other assets	310.2	301.5	(8.6)	Long-term investment (12.8)
Current Assets	308.4	309.2	0.8	
Total Assets	2,540.7	2,494.9	(45.7)	
Interest-bearing debt	1,628.7	1,552.7	(76.0)	Non-consolidated (20.9), Subsidiaries (55.0) [Corporate bonds (39.9), Long-term loans (25.2)]
Others	236.5	234.4	(2.0)	
Total Liabilities	1,865.2	1,787.1	(78.1)	
Shareholders' equity	650.8	692.5	41.7	Increase in capital surplus due to partial transfer of stock to non- controlling shareholders, Increase in retained earnings
Accumulated other comprehensive income	15.7	(15.7)	(31.5)	Foreign currency translation adjustment (40.5), Remeasurements of defined benefit plans +6.0
Non-controlling interests	8.8	31.0	22.1	
Total Net Assets	675.4	707.7	32.3	
D/E ratio (x) Shareholders' equity ratio	2.4 26.2%	2.3 27.1%		



#### The earnings forecasts released on April 28, 2016 remain unchanged. The non-consolidated earnings forecasts were revised on September 27, 2016.

			(Unit: billion yen)						(Unit:	billion yen)
		Consolida	ated				Non-cons	olidated		
	FY2015 Result	FY2016 Forecast	Comparison with FY2015 result		FY2015 Result	FY2016 Current Forecast	Comparis FY2015		FY2016 Initial Forecast	Comparison with initial Forecast
Operating Revenue	780.0	713.0	(67.0) (8.6)%	Operating Revenue	552.3	508.0	(44.3)	(8.0)%	522.0	(14.0)
Operating Income	87.9	73.0	(14.9) (17.0)%	Operating Income	41.5	28.0	(13.5)	(32.6)%	27.0	1.0
Ordinary Income	58.5	53.0	(5.5) (9.5)%	Ordinary Income	40.1	58.0	17.8	44.4%	33.0	25.0
Profit attributable to owners of parent	40.0	37.0	(3.0) (7.7)%	Profit	30.8	51.0	20.1	65.5%	26.0	25.0

Forecast of foreign exchange rate is revised	l as follows;
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					, ,					
Growth indicat	tor	FY2015 Result	FY2016 Forecast	Comparison w FY2015 resu			FY2015 Result	FY2016 Revised Forecast	FY2016 Previous Revised Forecast*	FY2016 Initial Forecast
J-POWER EBITI	DA	193.3	157.0	(36.3) (18.	8.8)%	Foreign exchange rate at term end				
		19919	20710	(00:0) (10:		Yen/US\$	120.61	116	105	115
						Yen/THB	3.34	3.2	2.9	3.2
		Cash div	vidends per sl	nare		THB/US\$	36.09	35.83	36.09	36.09
	Interim	Ye	ear end	Annual		Average foreign exchange rate				
FY2015	35	yen	35 yen	70	0 yen	Yen/US\$	120.15	109	105	115
FY2016	35	yen 35 ye	en (Forecast)	70 yen (Fore	ecast)		<b>6</b> //			
						* Foreign exchange rate o	ot "FY 2016 Pr	evious Revis	ed Forecast"	was

(Unit: billion ven)

\* Foreign exchange rate of "FY 2016 Previous Revised Forecast" was changed on 29 July, 2016.

## APPENDIX

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

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

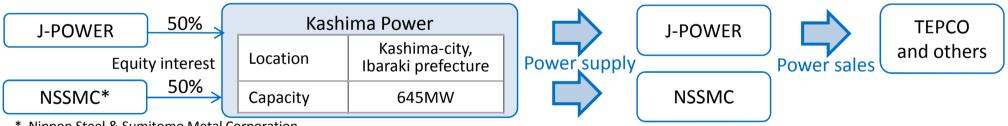
#### Takasago Thermal Power Plant New Unit No.1 and 2

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

✓ Status : Under construction (Beginning in November 2016)

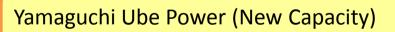
✓ Start of operation : scheduled for July 2020

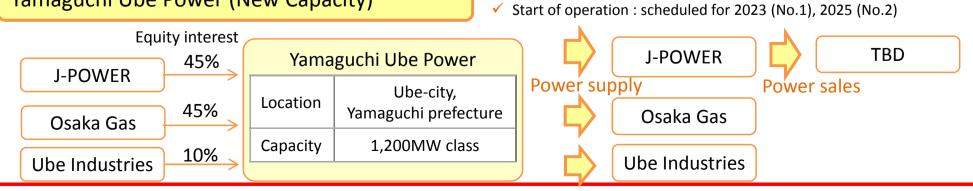
✓ Status : Implementing environmental assessment



\* Nippon Steel & Sumitomo Metal Corporation

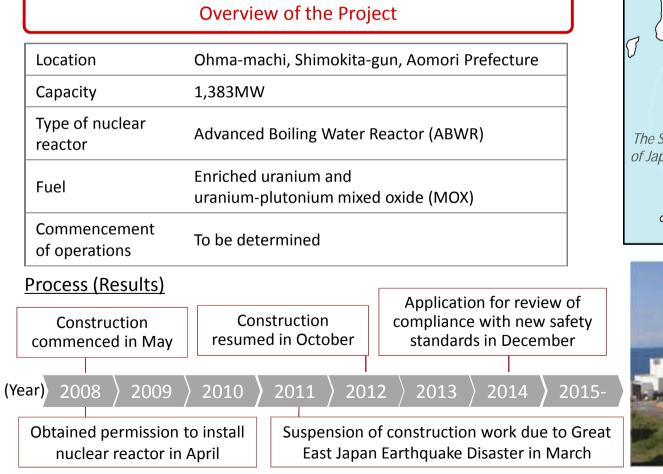
Kashima Power (New Capacity)

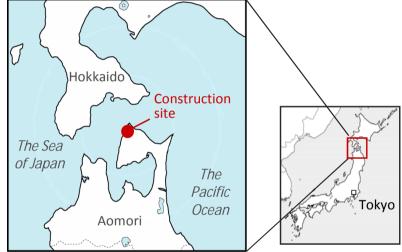






- On December 16, 2014, J-POWER submitted to NRA\* an application for permission for alteration of reactor installment license and an application for construction plan approval in order to undertake review of compliance with the new safety standards.
- J-POWER responds to review of NRA properly.
- J-POWER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



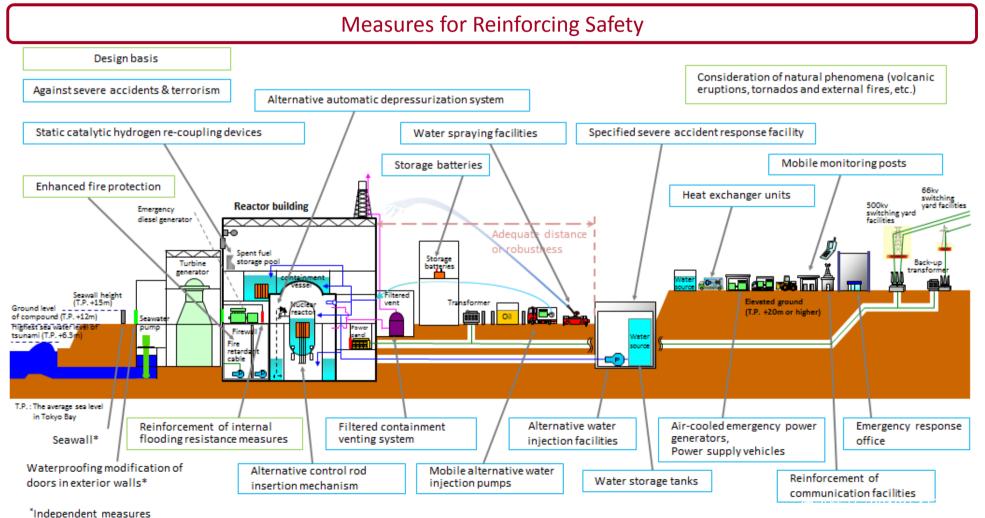






- Construction Works for Measures for Reinforcing Safety
- Construction Period: From the 2<sup>nd</sup> half of 2018 to the 2<sup>nd</sup> half of 2023
- Construction Cost: Approx. 130 billion yen

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



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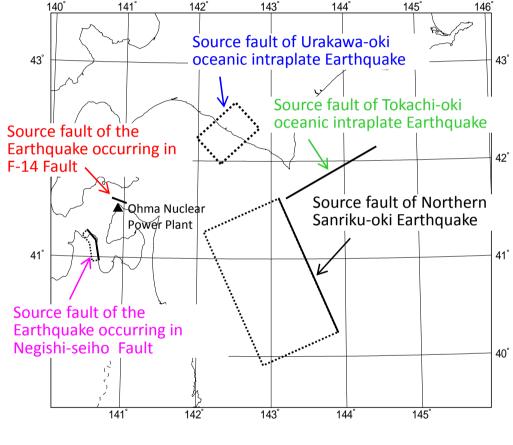
### Earthquakes for Investigation

Earthquakes listed below have been investigated by each earthquake type

Earthquake type	Earthquake for investigation	Magnitude
Interplate earthquakes	Northern Sanriku-oki Earthquake <sup>*</sup>	Mw8.3
Oceanic	Urakawa-oki oceanic intraplate Earthquake	M7.5
intraplate earthquakes	Tokachi-oki oceanic intraplate Earthquake	M8.2
Inland crustal	Earthquake occurring in Negishi-seiho Fault	M7.5
earthquakes	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





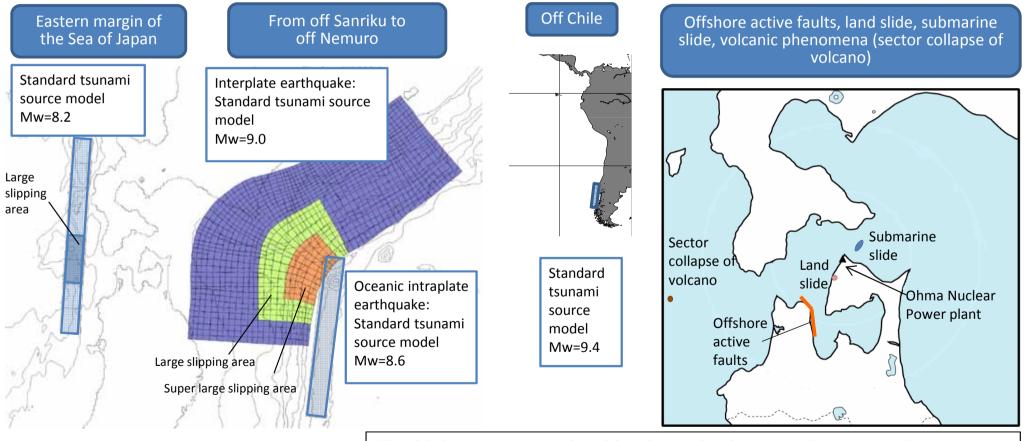
Source faults of earthquakes for investigation

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

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

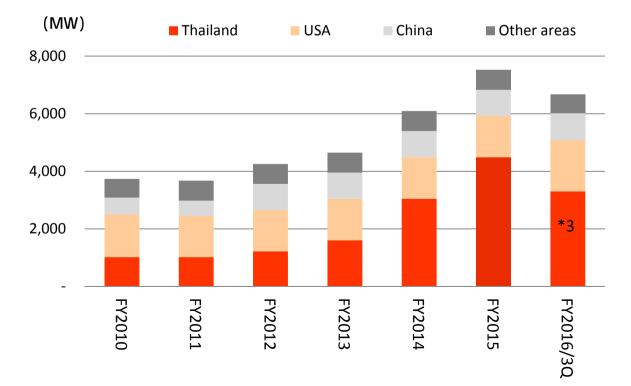
## Overseas Projects under Development (As of January 31, 2017)



#### [Overseas projects under Development]

Project	Туре	Output capacity (MW)	Ownership	Owned capacity (MW)	Power purchaser	Validity of purchase agreement	Scheduled Start of operation	Status
Indonesia		2,000		680				
Central Java	Coal	2,000	34%	680	PT Perusahaan Listrik Negara <sup>*1</sup>	25 years	2020	Under construction
USA		926		232				
Westmoreland	CCGT <sup>*2</sup>	926	25%	232	Operating as a merchant in the PJM	-	2018	Under construction

#### [Owned capacity of overseas project (in operation)]



(Unit: MW)

Countries/ Regions	In operation	Under development	Total
Thailand	3,300	-	3,300
USA	1,785	232	2,016
China	936	-	936
Other areas	656	680	1,336
Total	6,677	912	7,588

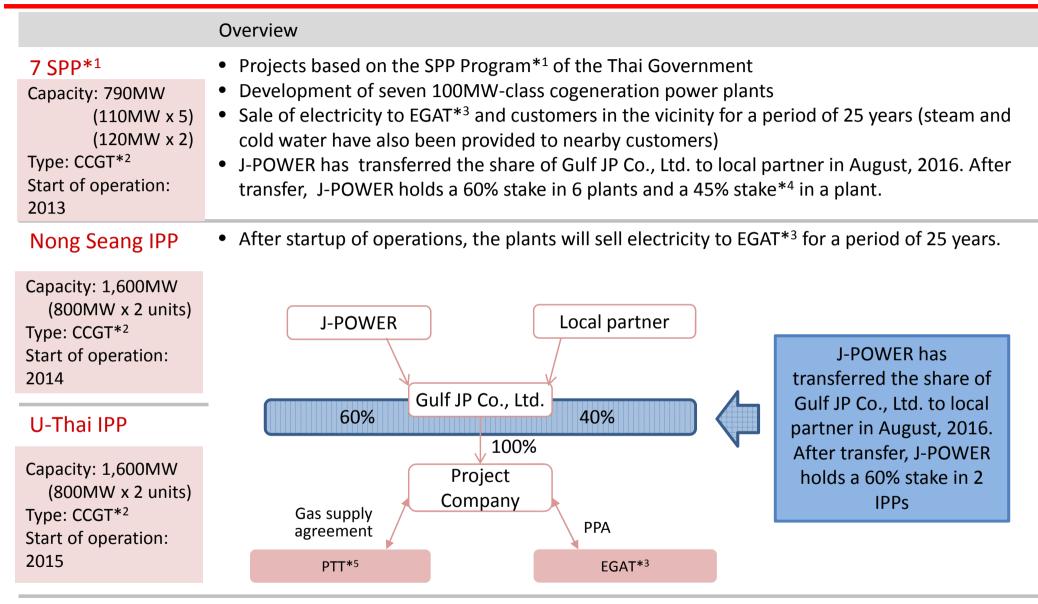
\*1 PT Perusahaan Listrik Negara: State-owned electric power utility in Indonesia

\*2 CCGT: Combined Cycle Gas Turbine

\*3 The details of share transfer of consolidated projects in Thailand are shown on the next page.

## Projects in Thailand by Consolidated Subsidiaries



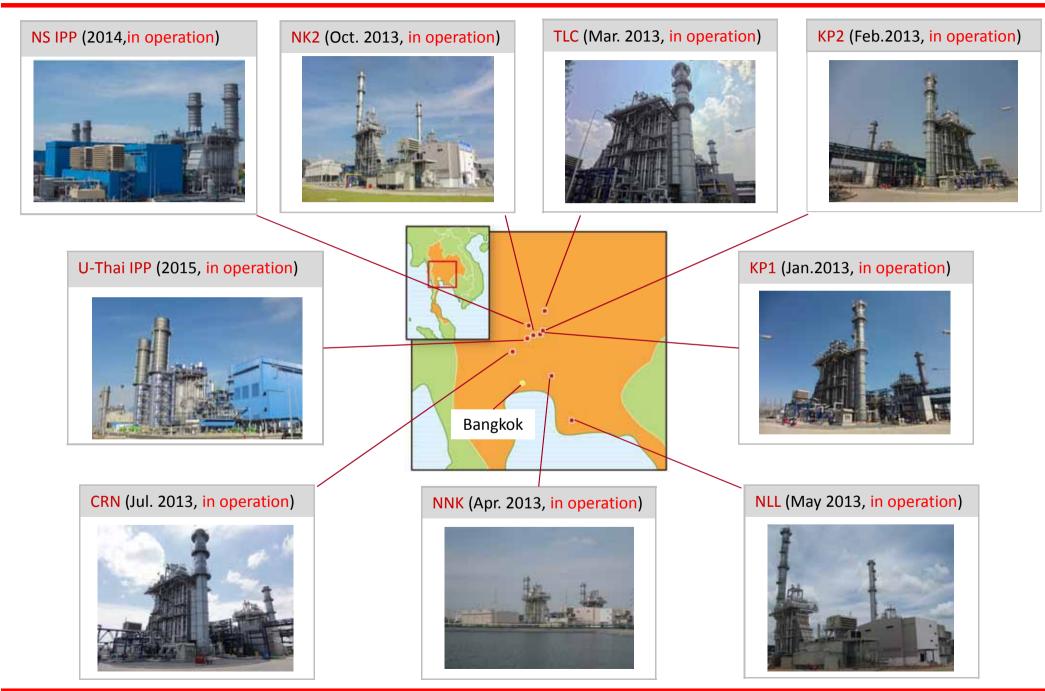


\*1 SPP (Small Power Producers) program: The long-term power purchase scheme established by the Thai Government. This scheme promotes cogeneration systems, renewable energy, and so forth, and aims at reducing the import and use of fuel oil. EGAT guarantees the purchase of electricity generated from eligible 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 PTT: State-owned gas and oil company in Thailand

## Projects in Thailand by Consolidated Subsidiaries (continued)





Note: Particulars in parentheses: (Start of operation)



					(Unit:	100 million yen)
	FY2012	FY2013	FY2014	FY2015	FY2015	FY2016
					3Q	30
Operating revenue	6,560	7,068	7,506	7,800	5,788	5,309
Electric utility operating revenue	6,053	6,090	5,881	5,708	4,310	3,929
Overseas business operating revenue	16	428	1,089	1,559	1,109	1,033
Other business operating revenue	490	549	535	532	368	346
Operating expenses	6,014	6,476	6,777	6,921	5,010	4,600
Operating income	545	591	728	879	777	709
Non-operating revenue	175	223	227	178	159	178
Share of profit of entities accounted for using equity method	117	163	156	108	108	82
Other	58	59	70	69	50	95
Non-operating expenses	273	414	362	472	386	254
Interest expenses	223	253	282	304	225	214
Other	49	161	79	167	161	40
Ordinary income	448	400	593	585	551	632
Extraordinary income	-	23	21	-	-	-
Profit attributable to owners of parent	298	286	432	400	394	445



							.00 million yen)
	FY2012	FY2013	FY2014	FY2015	FY2015 3Q	FY2016 3Q	YOY change
Operating revenue	5,869	5,828	5,579	5,523	4,185	3,822	(362)
Electric power business	5,772	5,729	5,485	5,430	4,111	3,739	(372)
Electric power generation business (non-consolidated)	5,206	5,167	4,953	4,902	3,715	3,341	(373)
Transmission and other	566	562	532	527	396	397	1
Incidental business	97	99	93	93	73	83	10
Operating expenses	5,436	5,423	5,133	5,107	3,718	3,452	(265)
Electric power business	5,347	5,334	5,049	5,023	3,651	3,374	(276)
Personnel expense	340	298	285	318	236	322	86
Amortization of the actuarial difference in retirement benefits	5	(30)	(43)	(23)	(17)	80	97
Fuel cost	2,384	2,502	2,284	2,184	1,660	1,370	(289)
Repair and maintenance cost	564	585	610	583	441	461	19
Depreciation and amortization cost	894	815	778	734	538	371	(166)
Other	1,162	1,133	1,090	1,202	775	849	73
Incidental business	88	89	84	84	67	78	10
Operating income	433	404	445	415	466	369	(96)



(Unit: 100 million yen)

			Electric power	Electric power -related	Overseas	Other	Subtotal	Elimination*	Consolidated
FY2016	Sale	S	3,941	2,387	1,033	154	7,517	(2,207)	5,309
3Q		Sales to customers	3,929	204	1,033	141	5,309	-	5,309
	Ord	inary income	323	45	255	6	630	1	632
FY2015	Sale	S	4,322	2,455	1,109	155	8,043	(2,254)	5,788
3Q		Sales to customers	4,310	226	1,109	141	5,788	-	5,788
	Ord	inary income	386	69	81	4	541	9	551
year-on-year change	Sale	S	(380)	(68)	(76)	(1)	(526)	47	(478)
		Sales to customers	(380)	(21)	(76)	0	(478)	-	(478)
	Ord	inary income	(63)	(23)	173	2	88	(7)	81

#### "Electric Power Business"

J-POWER group's hydroelectric, thermal power (including subsidiaries' thermal power (IPPs, for PPSs and others)), wind power and transmission business. The majority of consolidated revenue is derived from this segment.

#### "Electric Power-Related Business"

These focus on peripheral business 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 Business"

Overseas power generation business, overseas engineering and consulting business

#### "Other Business"

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

## Consolidated: Cash Flow



					(Unit: 1	.00 million yen)
	FY2012	FY2013	FY2014	FY2015	FY2015 3Q	FY2016 3Q
Operatging activities	1,197	1,221	1,478	1,461	939	592
Profit before income taxes (reference) Non-consolidated	451	427	615	584	551	632
depreciation and amortization	894	815	778	734	538	371
Investing activities	(1,703)	(1,773)	(1,429)	(1,315)	(904)	(871)
Capital expenditure for subsidiaries (reference)	(1,002)	(957)	(879)	(375)	(308)	(135)
Non-consolidated CAPEX*	(662)	(865)	(611)	(1,063)	(690)	(723)
Free cash flow	(505)	(552)	48	145	34	(279)

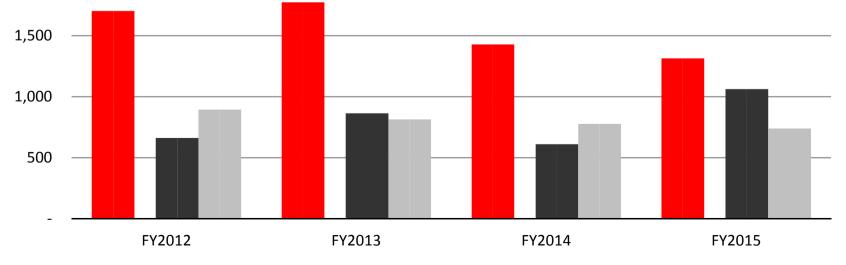
(Unit: 100 million yen)

2,000

Consolidated CF for investing activities

Non-consolidated capital expenditure

Non-consolidated depreciation and amortization



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

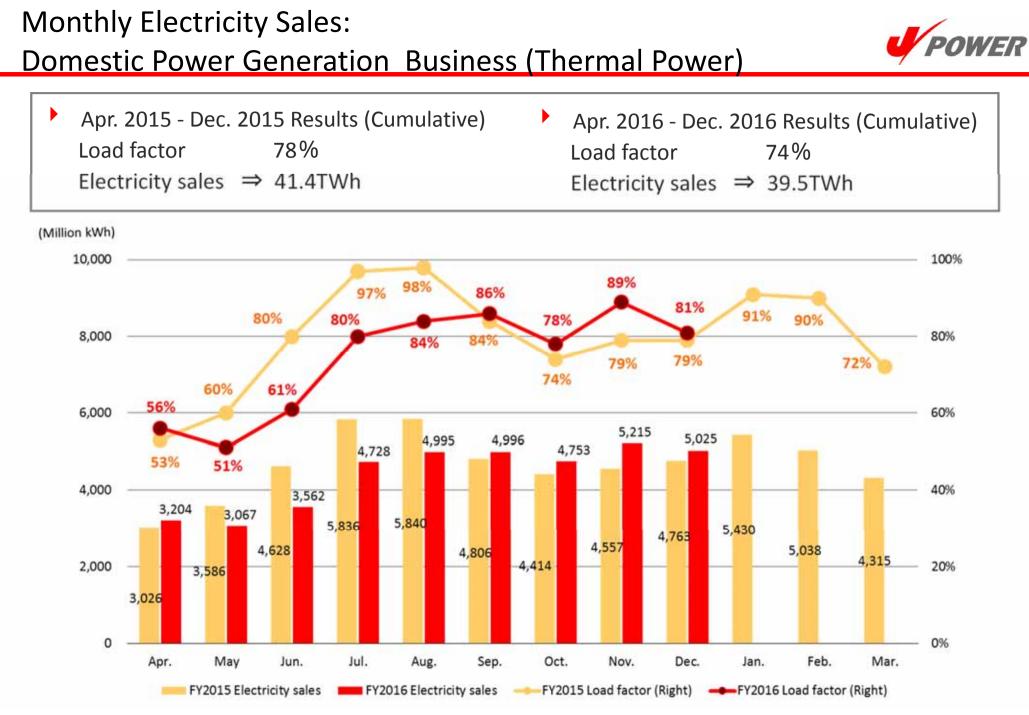
## Consolidated: Key Ratios and Key Data



						(Unit:	100 million yen)
		FY2012	FY2013	FY2014	FY2015	FY2015 3Q	FY2016 3Q
(PL)	Operating revenue	6,560	7,068	7,506	7,800	5,788	5,309
	Operating income	545	591	728	879	777	709
	Ordinary income	448	400	593	585	551	632
	Profit attributable to owners of parent	298	286	432	400	394	445
(BS)	Total assets	21,699	23,852	26,591	25,407	25,466	24,949
	Construction in progress	4,646	5,126	5,069	4,410	4,745	4,660
	Shareholders' equity	4,539	5,162	6,887	6,665	6,796	6,767
	Net assets	4,538	5,194	6,962	6,754	6,876	7,077
	Interest-bearing debts	15,230	16,499	17,236	16,287	16,294	15,527
(CF)	Investing activities	(1,703)	(1,773)	(1,429)	(1,315)	(904)	(871)
	Free cash flow	(505)	(552)	48	145	34	(279)
	(Ref) Non-consolidated CAPEX*1	(662)	(865)	(611)	(1,063)	(690)	(723)
	(Ref) Non-consolidated depreciation	894	815	778	734	538	371
ROA (	%)	2.1	1.8	2.4	2.3	-	-
ROA (	ROA excl. Construction in progress) (%)	2.7	2.2	2.9	2.8	-	-
ROE (S	%)	6.9	5.9	7.2	5.9	-	-
EPS (	¥)	198.65	191.23	284.43	218.97	215.68	243.48
BPS (	¥)	3,024.98	3,440.23	3,762.52	3,641.59	3,712.92	3,697.13
Share	holders' equity ratio (%)	20.9	21.6	25.9	26.2	26.7	27.1
D/E ra	tio	3.4	3.2	2.5	2.4	2.4	2.3
Numb	per of shares issued*2 (thousand)	150,052	150,051	183,050	183,049	183,049	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)



\* Load factors of thermal power show the results for non-consolidated only.

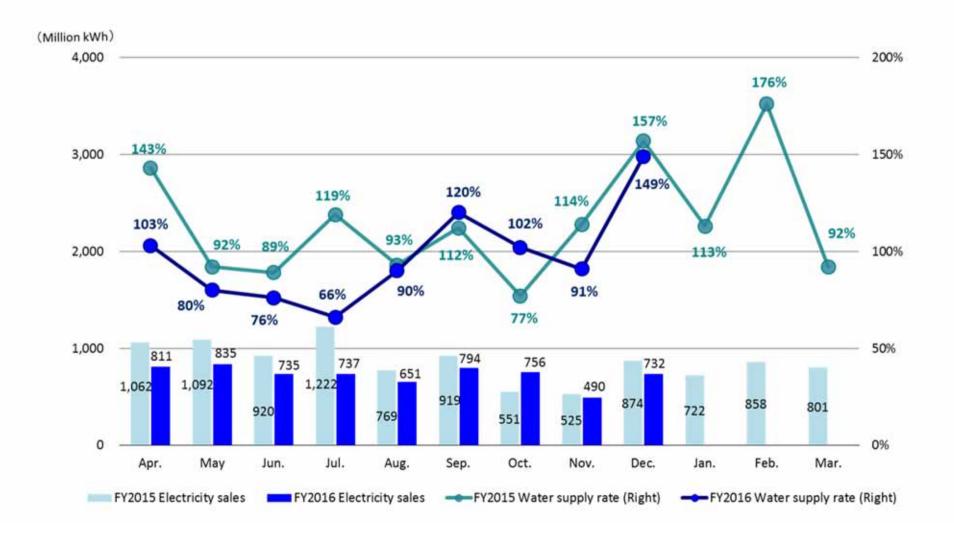
\* Proportion of equity holding is not taken into account.

## Monthly Electricity Sales:

**Domestic Power Generation Business (Hydroelectric Power)** 



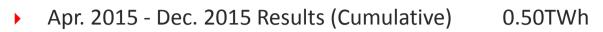
Apr. 2015 - Dec. 2015	5 Results (Cumulative)	Apr. 2016 - Dec. 2016	6 Results (Cumulative)
Water supply rate	109%	Water supply rate	93%
Electricity sales	7.9 TWh	Electricity sales	6.5 TWh



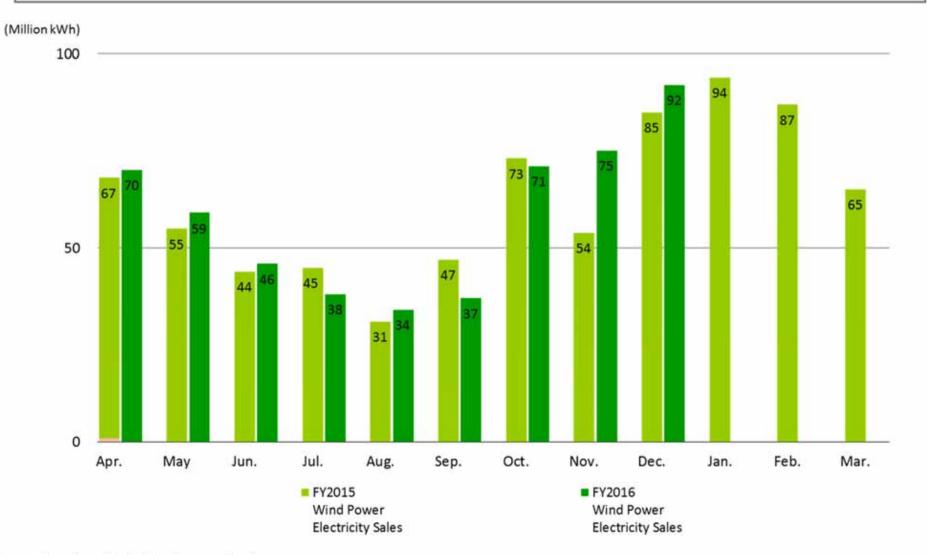
## Monthly Electricity Sales:

## **Domestic Power Generation Business (Wind Power)**





Apr. 2016 - Dec. 2016 Results (Cumulative) - 0.52TWh



\* Proportion of equity holding is not taken into account.



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0,0	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr Dec.
Year-on-year (Hydro)	76%	76%	80%	60%	85%	86%	137%	93%	84%				82%
••Year-on-year (Thermal)	106%	86%	77%	81%	86%	104%	108%	114%	105%				95%
-Year-on-year (Wind)	104%	106%	104%	85%	110%	79%	97%	139%	109%				104%
Year-on-year Total	98%	84%	78%	77%	86%	101%	111%	113%	102%				93%





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