

Summary of FY2019 Third Quarter Earnings Results



Electric Power Development Co., Ltd.

January 31, 2020

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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I. Summary of FY2019 Third Quarter Earnings Results

Summary of FY2019 Third Quarter Earnings Results



(Unit: billion yen)

Consolidated	FY2018 3rd Quarter (Apr.-Dec.)	FY2019 3rd Quarter (Apr.-Dec.)	Year-on-year change	
Operating Revenue	659.9	676.0	16.0	2.4 %
Operating Income	77.7	68.2	(9.5)	(12.3) %
Ordinary Income	73.2	66.9	(6.3)	(8.7) %
Profit attributable to owners of parent	51.7	38.7	(12.9)	(25.1) %

Non-consolidated	FY2018 3rd Quarter (Apr.-Dec.)	FY2019 3rd Quarter (Apr.-Dec.)	Year-on-year change	
Operating Revenue	484.7	424.1	(60.5)	(12.5) %
Operating Income	35.5	27.0	(8.4)	(23.8) %
Ordinary Income	74.6	65.6	(8.9)	(12.0) %
Profit	67.6	60.7	(6.8)	(10.1) %

Growth indicator	FY2018 3rd Quarter (Apr.-Dec.)	FY2019 3rd Quarter (Apr.-Dec.)	Year-on-year change	
J-POWER EBITDA *1	147.0	138.2	(8.7)	(5.9) %

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

Key Data (Electric Power Sales)

	FY2018 3rd Quarter (Apr.-Dec.)	FY2019 3rd Quarter (Apr.-Dec.)	Year-on-year change	
Electric Power Sales (TWh)				
Electric Power Business	51.3	53.2	1.9	3.7 %
Hydroelectric Power	8.0	7.0	(0.9)	(12.1) %
Thermal Power	40.6	37.3	(3.3)	(8.2) %
Wind Power	0.5	0.5	0.0	3.7 %
Other ^{*1}	2.1	8.3	6.2	291.3 %
Overseas Business ^{*2}	7.9	11.4	3.4	43.7 %
Water supply rate	110%	98%	(12) points	
Load factor ^{*3}	78%	74%	(4) points	

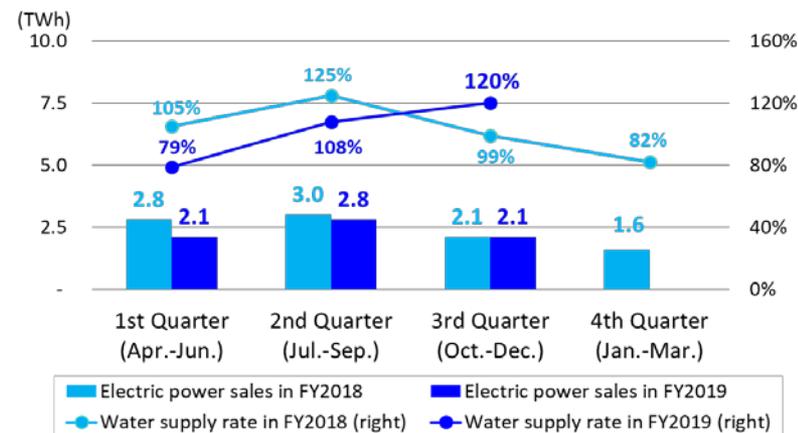
*1 Electric power sales volume of electricity procured from wholesale electricity market, etc.

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

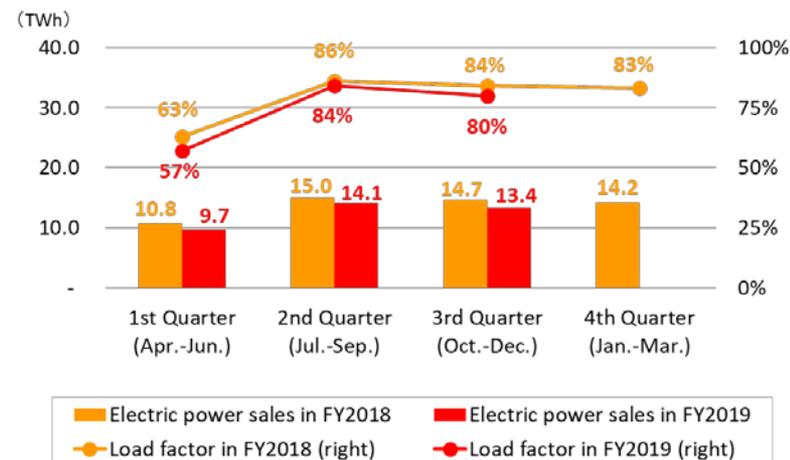
*3 Load factors of thermal power show the results for non-consolidated only

Electric Power Sales for each Quarter

[Domestic Hydroelectric Power]



[Domestic Thermal Power]



Key Data (Operating Revenue)

	FY2018 3rd Quarter (Apr.-Dec.)	FY2019 3rd Quarter (Apr.-Dec.)	Year-on-year change	
Operating Revenue (Billion yen)	659.9	676.0	16.0	2.4 %
Electric Power Business	509.3	509.8	0.5	0.1 %
Electric Power Generation Business	470.9	470.3	(0.5)	(0.1) %
Transmission / Transformation Business	37.2	37.3	0.1	0.4 %
Overseas Business ^{*1}	106.8	130.6	23.7	22.3 %
Other Business ^{*2}	43.8	35.5	(8.2)	(18.9) %
Foreign exchange rate at the end of September (Yen/US\$)	113.57	107.92		
Foreign exchange rate at the end of September (Yen/THB)	3.50	3.53		
Foreign exchange rate at the end of September (THB/US\$)	32.41	30.59		
Average foreign exchange rate (Yen/US\$)	111.14	108.65		

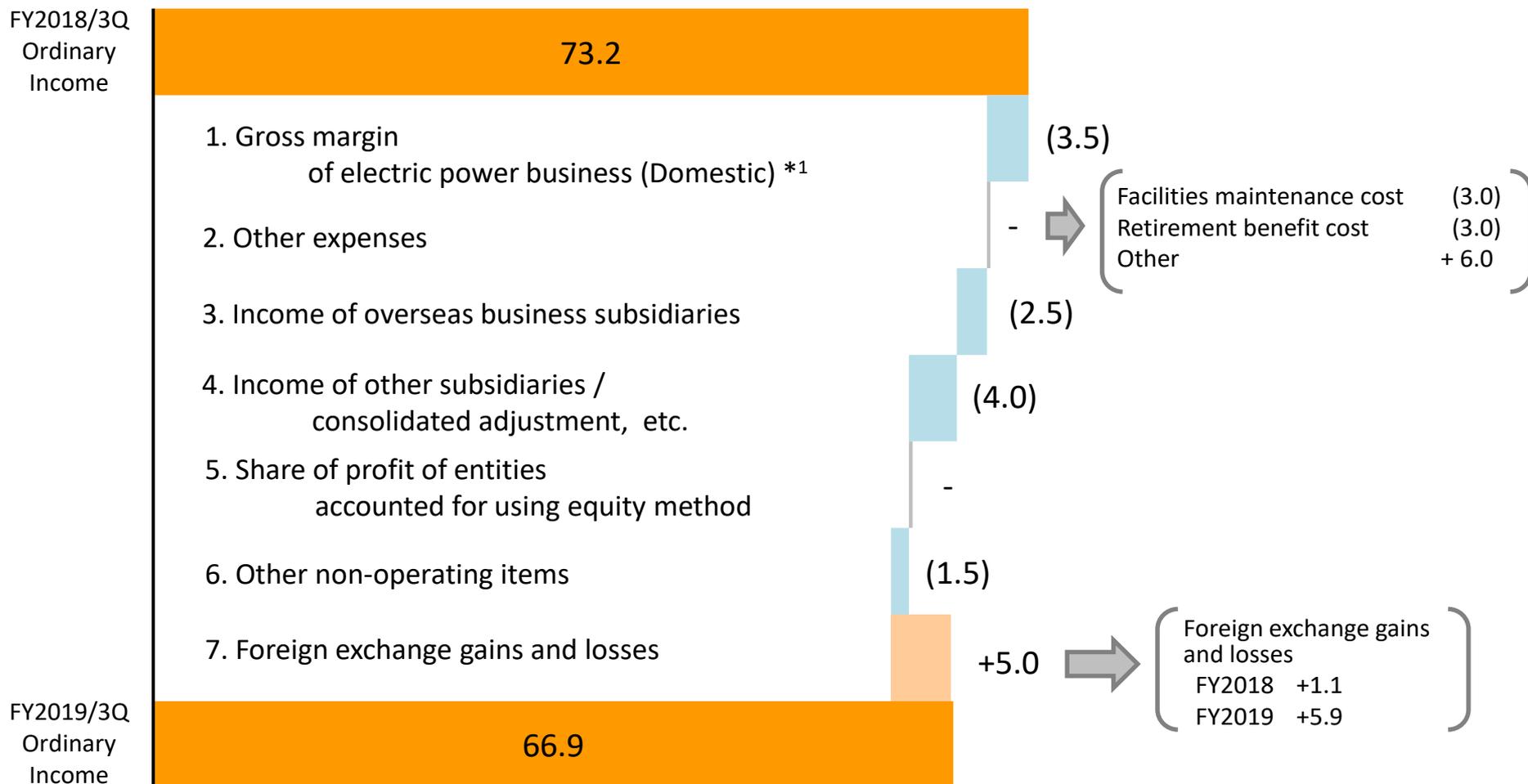
*1 Sales for the overseas business segment (Sales from overseas consolidated subsidiaries and overseas consulting business, etc.)

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

FY2019 Third Quarter Earnings Results (Main Factors for Change)



(Unit: billion yen)



*1 Gross margin of electric power business (Domestic) : Domestic electric power business revenue (hydro, thermal, wind and other) – fuel costs, etc.

Revenue / Expenditure Comparison



(Unit: billion yen)

	FY2018 3rd Quarter (Apr.-Dec.)	FY2019 3rd Quarter (Apr.-Dec.)	Year-on-year change	Main factors for change
Operating Revenue	659.9	676.0	16.0	
Electric power business	509.3	509.8	0.5	
Overseas business	106.8	130.6	23.7	Increase in electric power sales volume at power generating companies in Thailand, etc
Other business	43.8	35.5	(8.2)	Decreased revenue in coal sales business and an Australian coal mine investment subsidiary, etc.
Operating Expenses	582.2	607.7	25.5	Electric power business +3.3, Overseas business +26.0, Other business (3.8)
Operating Income	77.7	68.2	(9.5)	
Non-operating Revenue	17.3	20.4	3.1	
Share of profit of entities accounted for using equity method	9.2	9.1	(0.1)	
Foreign exchange gains	1.1	5.9	4.8	
Other	6.8	5.3	(1.5)	
Non-operating Expenses	21.7	21.7	(0.0)	
Interest expenses	19.9	19.6	(0.3)	
Other	1.8	2.1	0.3	
Ordinary Income	73.2	66.9	(6.3)	Electric power business (5.8), Overseas business +3.6, Other business (4.4)
Extraordinary losses	-	8.9	8.9	Loss equivalent to impairment loss of Birchwood project in the US +8.9
Total income taxes	13.9	10.2	(3.6)	Reversal of deferred tax liabilities associated with impairment of Birchwood project (2.4)
Profit attributable to owners of parent	51.7	38.7	(12.9)	

Balance Sheet



(Unit: billion yen)

	FY2018 End of FY	FY2019 End of 3Q	Change from prior year end	Main factors for change
Non-current Assets	2,401.6	2,414.8	13.1	
Electric utility plant and equipment	944.3	930.1	(14.1)	Non-consolidated (10.1), Subsidiaries and others (3.9)
Overseas business facilities	312.1	310.3	(1.7)	
Other non-current assets	94.8	89.8	(4.9)	
Construction in progress	582.0	633.7	51.6	Non-consolidated +21.0, Subsidiaries and others +30.6
Nuclear fuel	74.5	74.6	0.1	
Investments and other assets	393.7	376.0	(17.7)	Long-term investments (22.6)
Current Assets	364.5	373.9	9.3	
Total Assets	2,766.1	2,788.7	22.5	
Interest-bearing debt	1,642.8	1,663.4	20.6	Non-consolidated +12.2, Subsidiaries +8.4 [Corporate bonds +10.0, Long-term loans +9.2]
Other	277.7	279.7	2.0	
Total Liabilities	1,920.5	1,943.2	22.6	
Shareholders' equity	777.6	802.6	24.9	Retained earnings +25.0
Accumulated other comprehensive income	19.7	(7.4)	(27.1)	Deferred gains or losses on hedges (22.0)
Non-controlling interests	48.1	50.2	2.1	
Total Net Assets	845.5	845.4	(0.0)	
D/E ratio (x)	2.1	2.1		
Shareholders' equity ratio	28.8%	28.5%		

II. Summary of FY2019 Earnings Forecast

Summary of FY2019 Earnings Forecast



(Unit: billion yen)

Consolidated	FY2018 Result	FY2019 Current Forecast	Comparison with FY2018 Result		FY2019 Initial Forecast*	Comparison with Initial Forecast
			Change	%		
Operating Revenue	897.3	920.0	22.6	2.5%	940.0	(20.0)
Operating Income	78.8	75.0	(3.8)	(4.9)%	73.0	2.0
Ordinary Income	68.5	71.0	2.4	3.6%	60.0	11.0
Profit attributable to owners of parent	46.2	41.0	(5.2)	(11.4)%	42.0	(1.0)

Non-consolidated	FY2018 Result	FY2019 Current Forecast	Comparison with FY2018 Result		FY2019 Initial Forecast*	Comparison with Initial Forecast
			Change	%		
Operating Revenue	646.9	575.0	(71.9)	(11.1)%	591.0	(16.0)
Operating Income	18.6	19.0	0.3	1.7%	16.0	3.0
Ordinary Income	54.4	55.0	0.5	1.1%	53.0	2.0
Profit	52.7	53.0	0.2	0.4%	51.0	2.0

Growth indicator	FY2018 Result	FY2019 Current Forecast	Comparison with FY2018 Result		FY2019 Initial Forecast*	Comparison with Initial Forecast
			Change	%		
J-POWER EBITDA	168.4	167.0	(1.4)	(0.9)%	166.0	1.0

	Cash dividends per share		
	Interim	Year end	Annual
FY2018	35 yen	40 yen	75 yen
FY2019	35 yen	40 yen (Forecast)	75 yen (Forecast)

*Initial forecast was released on April 26, 2019.

	FY2018 Result	FY2019 Current Forecast	Comparison with FY2018 Result		FY2019 Initial Forecast *5	Comparison with Initial Forecast		FY2018 Result	FY2019 Current Forecast	FY2019 Initial Forecast *5
Electric Power Sales (TWh)										
Electric Power Business	69.3	72.2	2.9	4.2%	72.8	(0.5)	Water supply rate	106%	98%	100%
Hydroelectric Power	9.7	9.0	(0.6)	(6.5)%	9.2	(0.1)	Load factor	79%	77%	76%
Thermal Power	54.9	51.6	(3.2)	(5.9)%	52.1	(0.4)	Foreign exchange rate at term end			
Wind Power	0.8	0.8	0.0	2.2%	0.8	(0.0)	Yen/USD	111.00	109.56	110.00
Other *1	3.8	10.6	6.7	174.9%	10.7	(0.0)	Yen/THB	3.41	3.63	3.50
Overseas Business *2	10.9	15.2	4.3	39.6%	12.6	2.6	THB/USD	32.45	30.15	32.45
Operating Revenue (Billion yen)	897.3	920.0	22.6	2.5%	940.0	(20.0)	Average foreign exchange rate			
Electric Power Business	693.7	688.0	(5.7)	(0.8)%	711.0	(23.0)	Yen/USD	110.92	108.98	110.00
Electric Power Generation Business	642.4	635.0	(7.4)	(1.2)%	658.0	(23.0)				
Transmission/Transformation Business	49.4	50.0	0.5	1.0%	50.0	-				
Overseas Business *3	141.0	180.0	38.9	27.6%	163.0	17.0				
Other Business *4	62.5	52.0	(10.5)	(16.9)%	66.0	(14.0)				

*1 Electric power sales volume of electricity procured from wholesale electricity market, etc.

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

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

*5 Initial forecast was released on April 26, 2019.

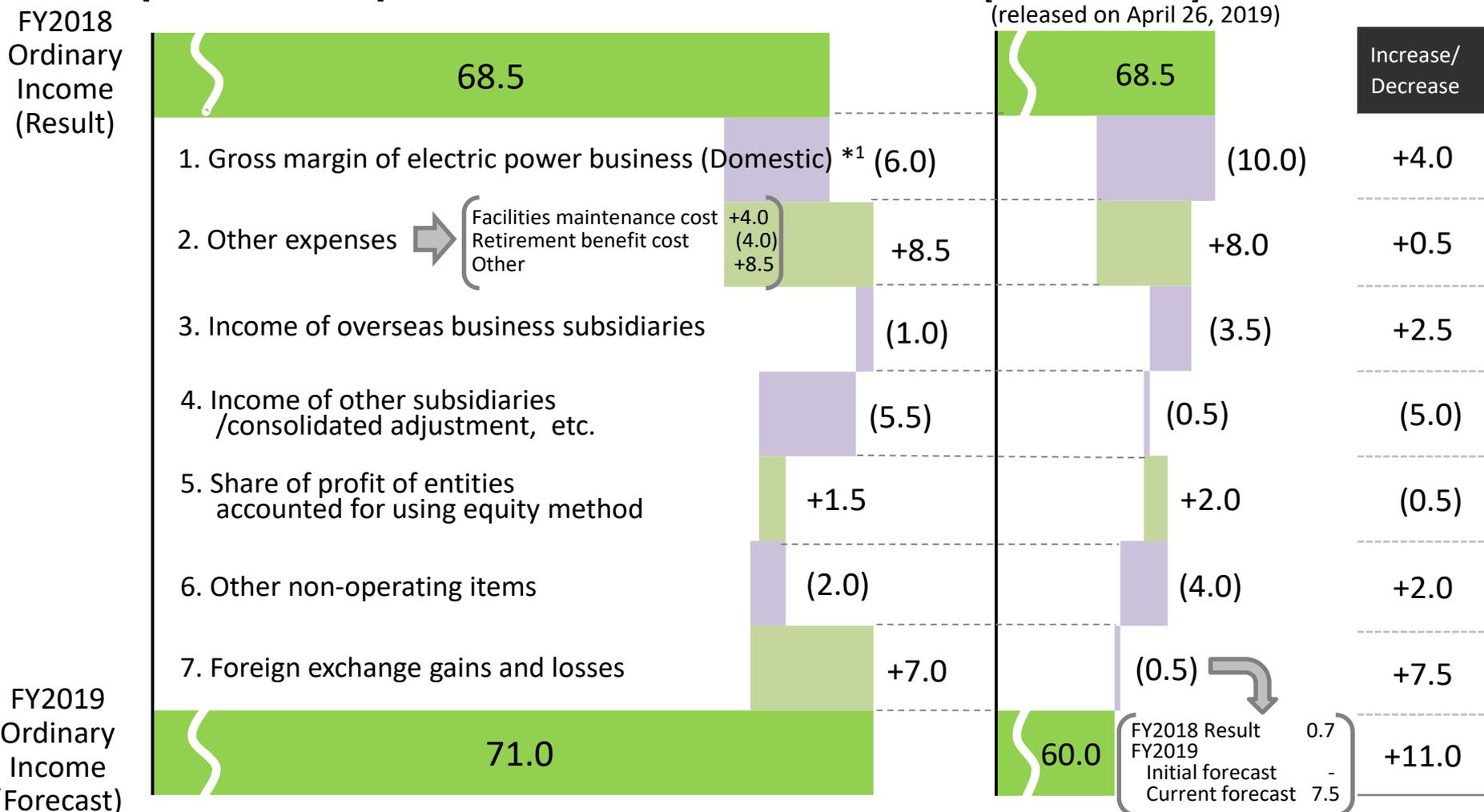
FY2019 Earnings Forecast (Main Factors for Change)



[Current forecast]

[Initial forecast]
(released on April 26, 2019)

(Unit: billion yen)



Note In addition to the above factors, the impact of impairment of Birchwood project in the US of (6.5) billion yen, which was posted in the second quarter earnings results, is included in profit attributable to owners of parent for the current forecast

*1 Domestic electric power business revenue (hydro, thermal, wind and other) – Fuel costs, etc.

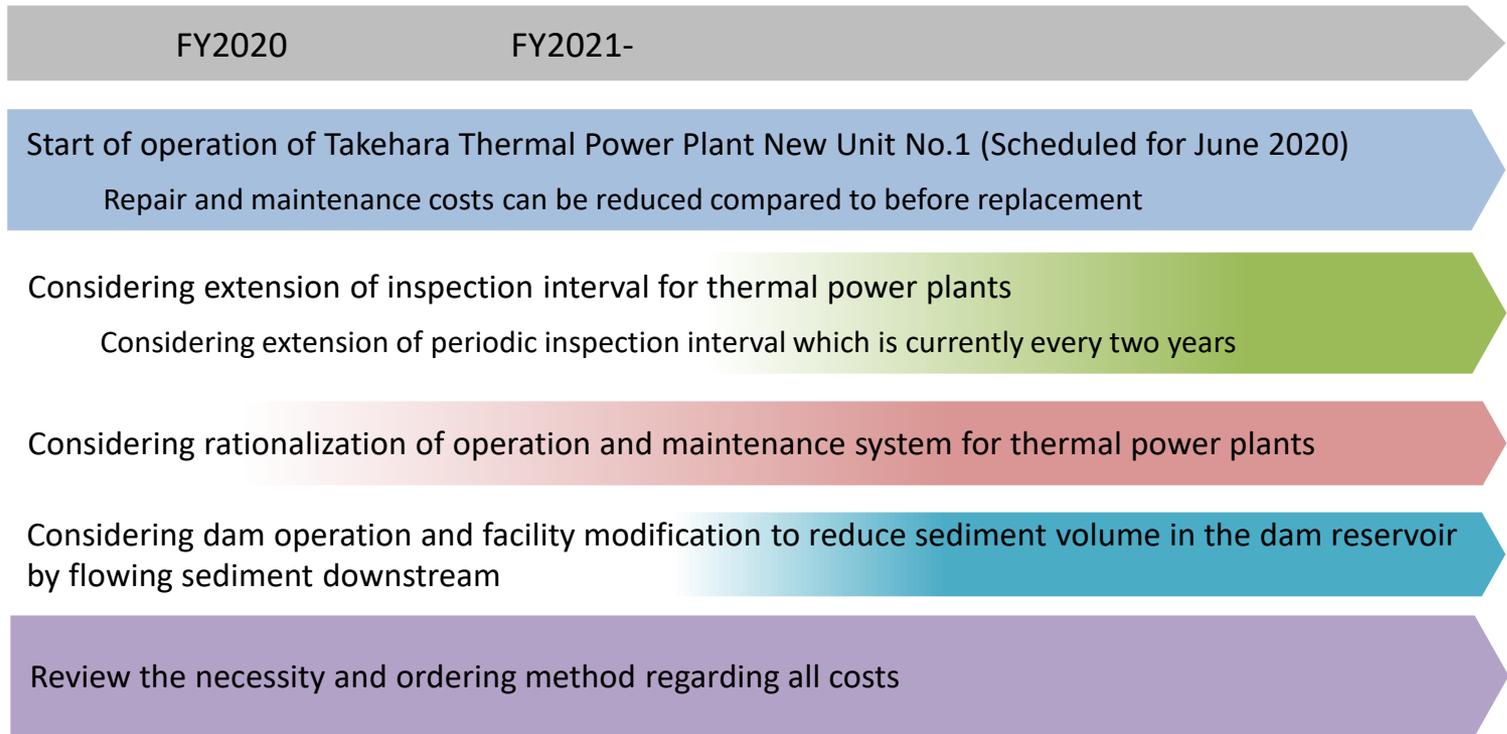
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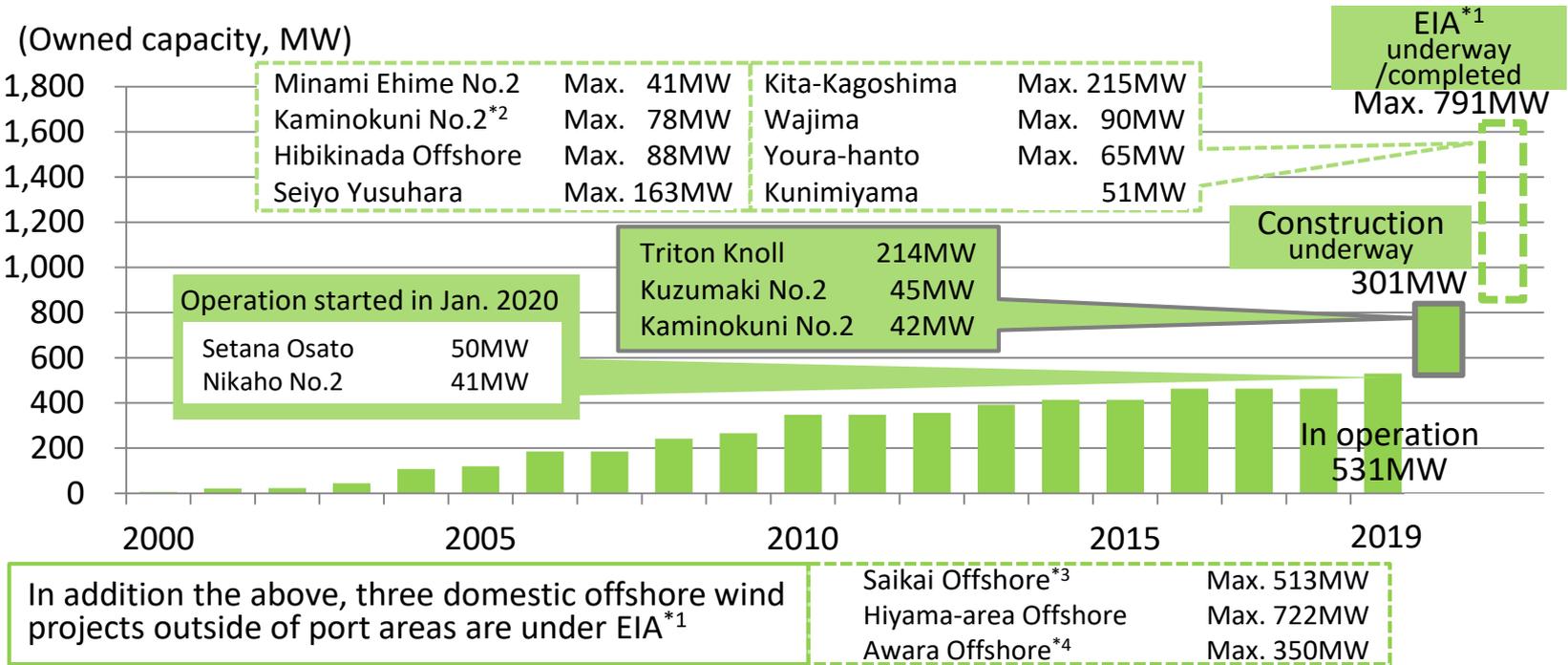
Main factors for increase in costs in recent years

- Repair and maintenance costs have increased with ageing of thermal power plants whose average age was 31 years at the end of FY2018
- Repair and maintenance costs have increased with increasing sediment management costs at dam reservoirs
- Consignment costs and research costs have increased with promotion of initiatives in accordance with the medium-term management plan which takes major changes in business environment surrounding J-POWER group as opportunities for growth
 - ✓ Costs for investigation toward further expansion of renewable energy
 - ✓ Research costs aiming at realizing zero emission in coal use including Osaki CoolGen Project which is engaged in demonstration tests of oxygen-blown IGCC, IGFC and CO2 separation and capture
- Quality maintenance costs of equipment for construction of Ohma Nuclear Power Plant

Initiatives aiming at reducing costs



Wind



*1 EIA: Environmental impact assessment *2 Expansion of Kaminokuni No.2 is under consideration
 *3 Conducted jointly with SUMITOMO CORPORATION *4 Conducted jointly with Mitsui Fudosan Co., Ltd.

Hydro

Project	Capacity	Note
Shinkatsurazawa/ Kumaoui	21.9MW	Start of operation : FY2022 (planned)
Ashoro Repowering	40.0→42.3MW	Completion of construction : FY2022 (planned)*5

*5 Operation with increased output is planned to start after improvement of nearby grid

Geo-thermal

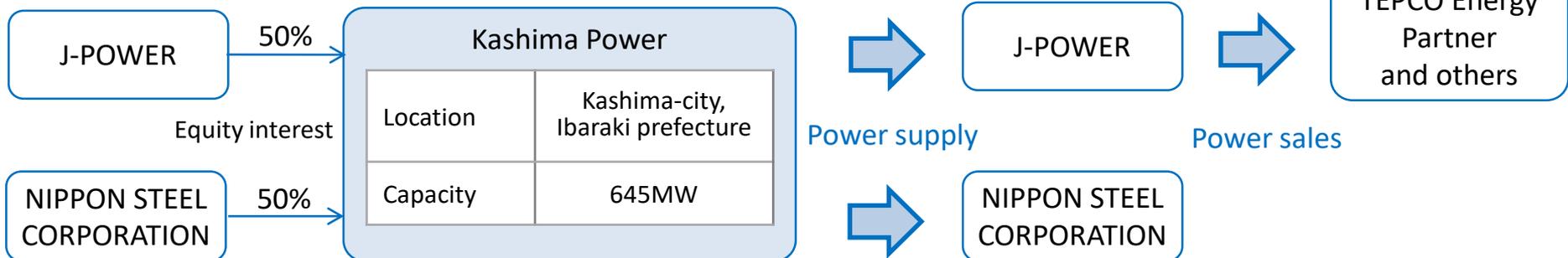
Project	Capacity	Equity ratio	Owned capacity	Start of operation
Wasabizawa	46.2MW	50%	23.1MW	Started operation in May 2019
Onikobe Replacement	14.9MW	100%	14.9MW	April 2023 (planned)
Appi	14.9MW	15%	2.2MW	April 2024 (planned)

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

Location	Takehara-city, Hiroshima prefecture
Status	Under construction
Start of operation	Scheduled for June 2020
Capacity	600MW (Unit No.1 &2) → 600MW (New Unit No.1) (Replacement in the same capacity)
Steam Condition	Sub-Critical → Ultra-supercritical

Kashima Power (New Capacity)

- ✓ Status : Under construction (Commenced in November 2016)
- ✓ Start of operation : Scheduled for July 2020



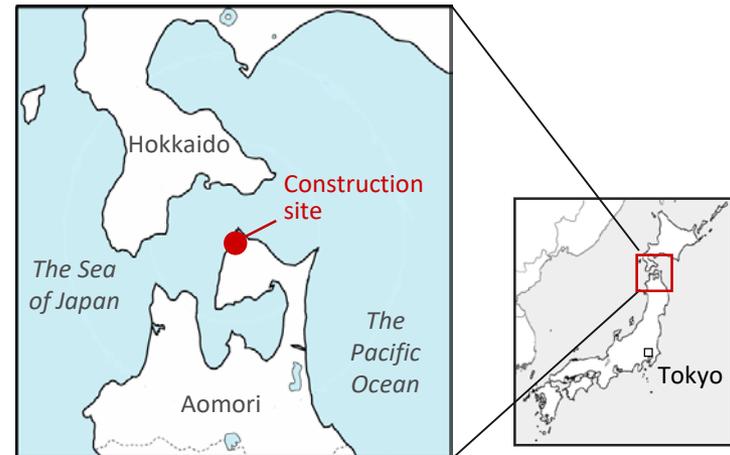
Yamaguchi Ube Power (New Capacity)

- ✓ The development plan for Yamaguchi Ube Power Project is under review due to withdrawal of one of the partners

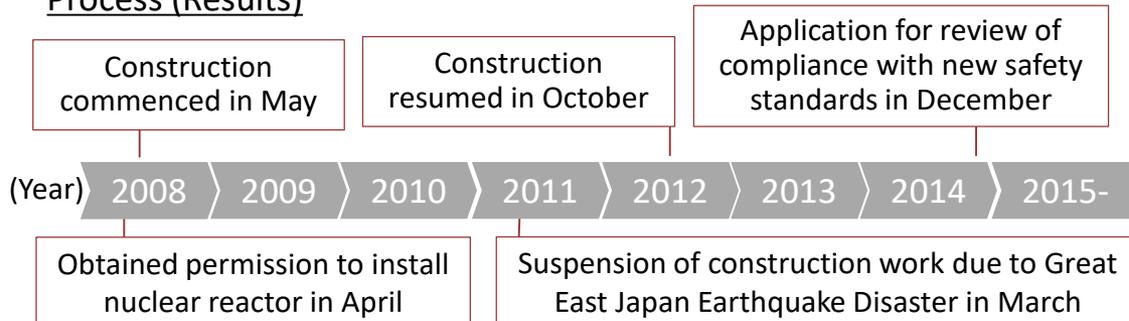
- In December 2014, J-POWER submitted to NRA* an application for permission for alteration of reactor installment license and an application for construction plan approval in order to undertake review of compliance with the new safety standards
- Pursue further improvements in safety continuously
- Sincerely and appropriately respond to compliance reviews and aim to restart full scale construction work quickly
- Strive for more polite information communication and mutual communication so that we can gain the understanding and trust of the community

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

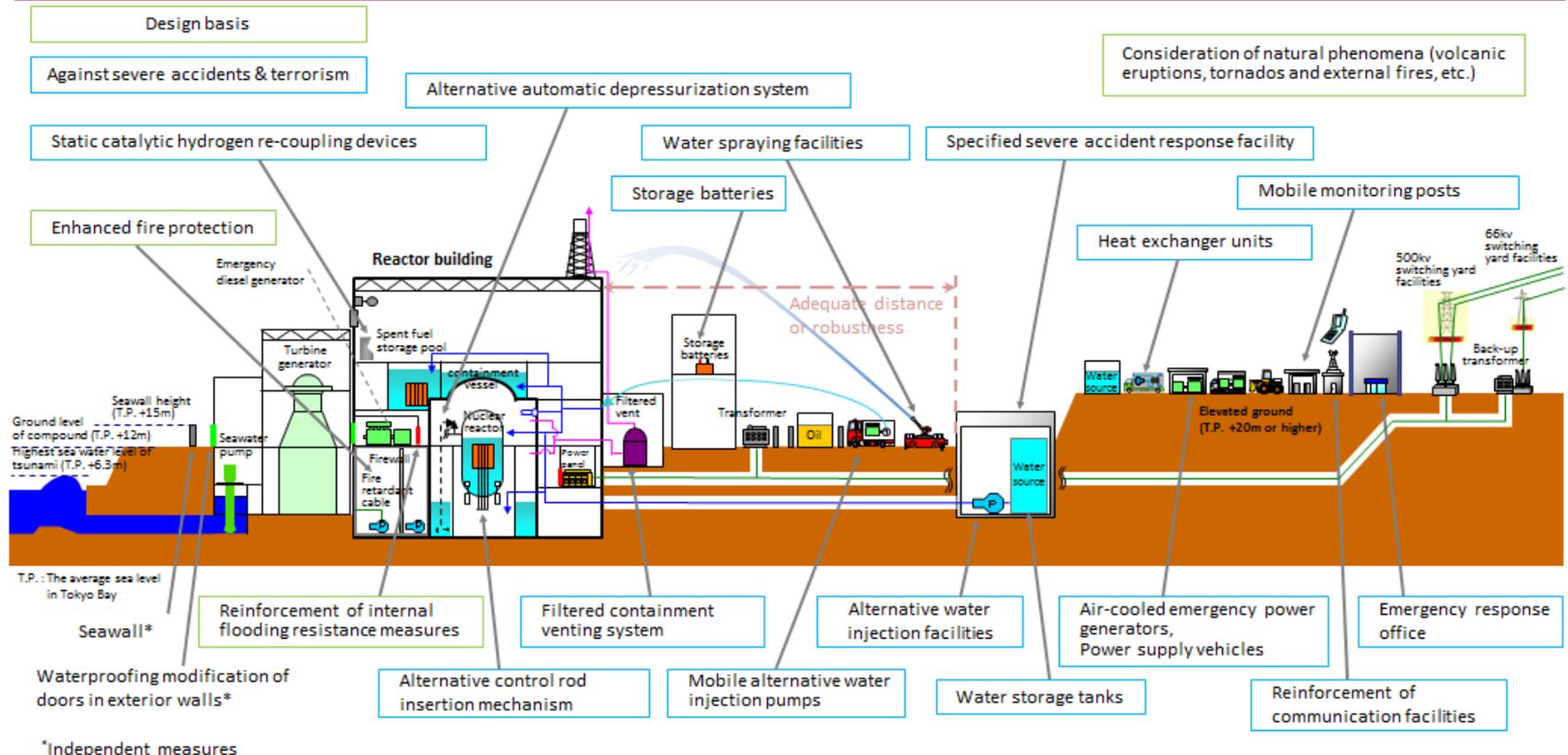
Construction Works for Measures for Reinforcing Safety

✓ Construction Period: From the 2nd half of 2020 to the 2nd half of 2025

✓ 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

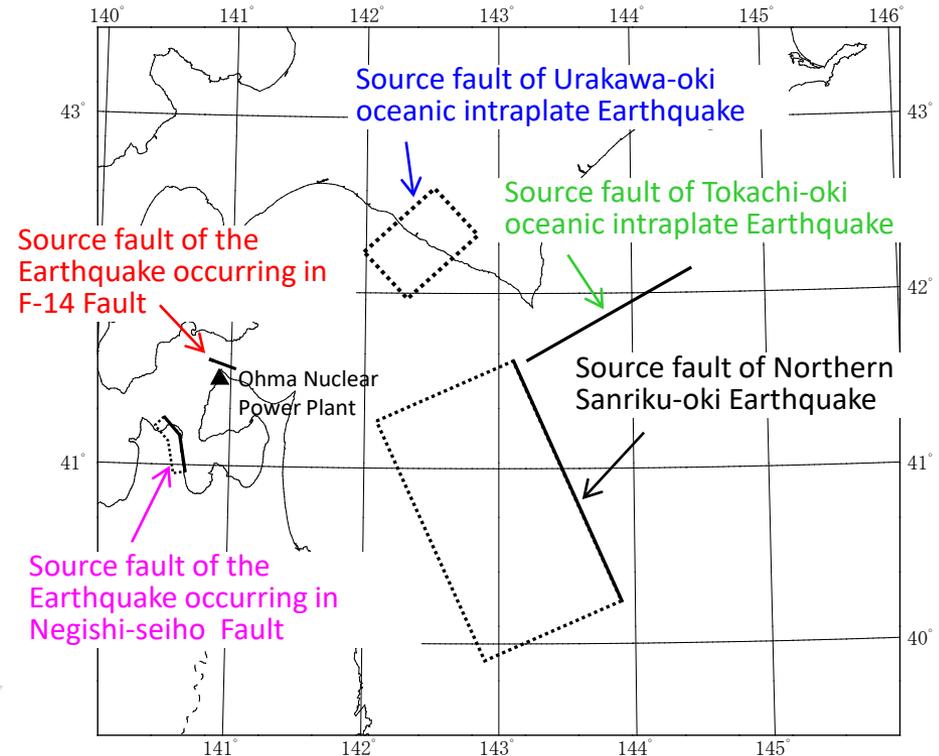


Earthquakes for Investigation

✓ Earthquakes listed below by earthquake type have been investigated

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



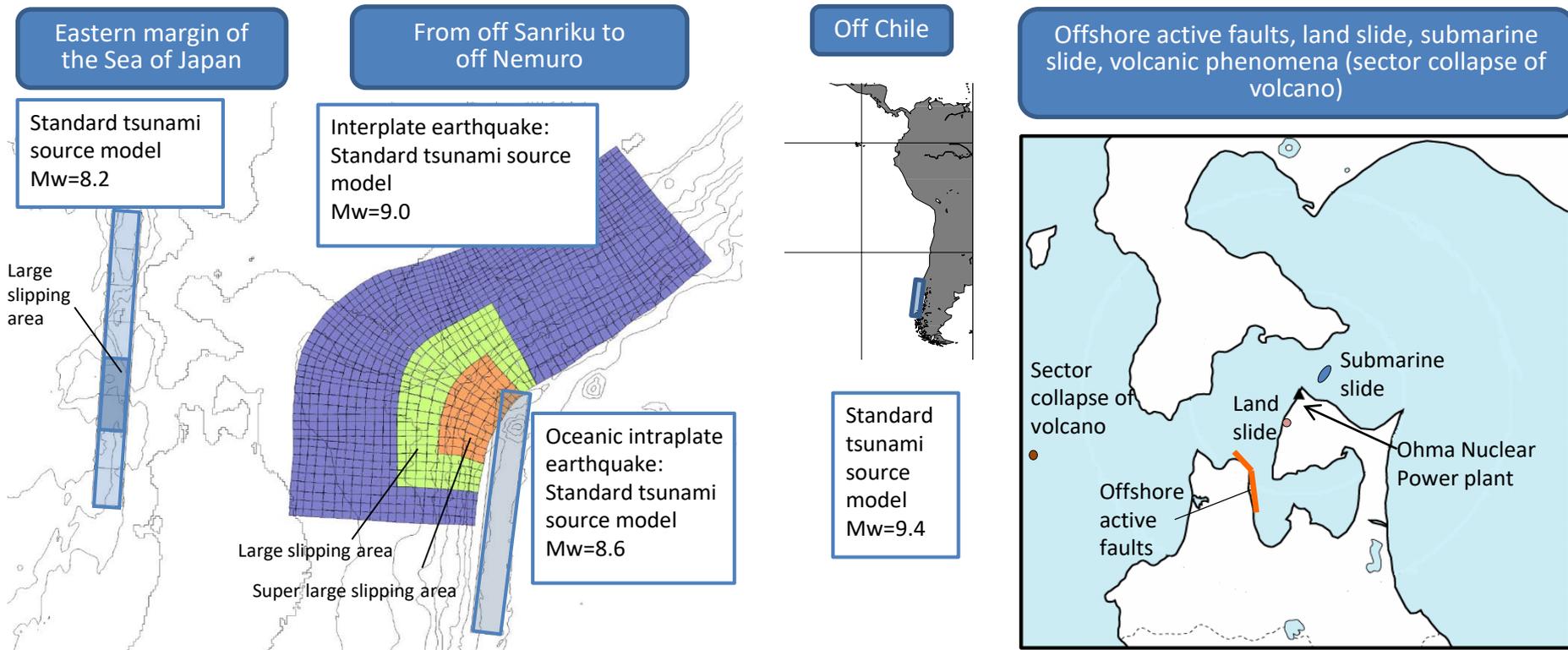
Source faults of earthquakes for investigation



Standard seismic motion: Horizontal 650 cm/s²
(Maximum acceleration) Vertical 435 cm/s²

■ 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 December 31, 2019)

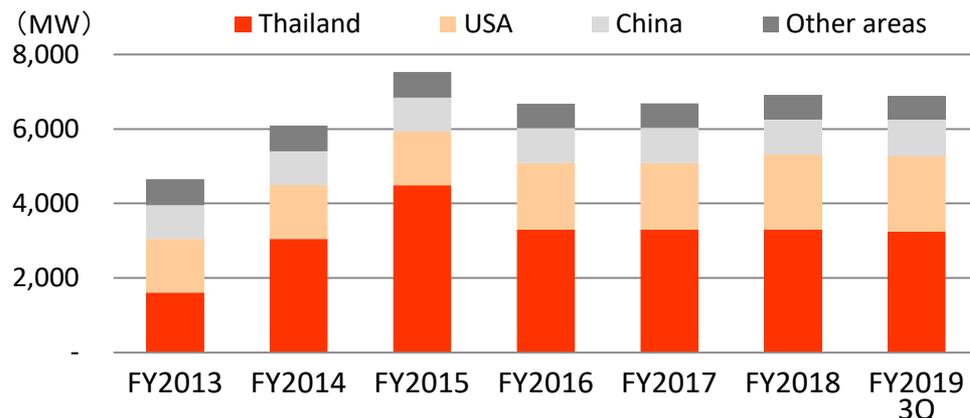


[Overseas projects under Development]

Project	Type	Output capacity (MW)	Ownership	Owned capacity (MW)	Power purchaser	Purchase agreement valid for	Scheduled start of operation	Status
Indonesia		2,000		680				
Central Java	Coal	2,000	34%	680	PT Perusahaan Listrik Negara* ¹	25 years	2020* ²	Under construction
UK		857		214				
Triton Knoll	Offshore wind	857	25%	214	A fixed price is guaranteed for 15 years under UK CfD regime* ³		2021	Under construction
USA		1,200		1,200				
Jackson	CCGT* ⁴	1,200	100%	1,200	Sales at PJM* ⁵ market	-	2022	Under construction

[Owned capacity of overseas projects (in operation)]

(MW)



Countries/Regions	In operation	Under development	Total
Thailand	3,246	-	3,246
USA	2,016	1,200	3,216
China	984	-	984
Other areas	632	894	1,526
Total	6,878	2,094	8,972

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

*2 Start of operation could possibly delay by a few months from the originally planned schedule, which is unit No.1 in Jun. 2020 and unit No.2 in Dec.2020.

*3 CfD regime: The CfD is an investment incentive program of UK, which will be granted to wind power generators and other low carbon electric power resources. Accredited electricity generators shall execute the CfD agreement with the LCCC (Low Carbon Contracts Company), a CfD management company owned by the British Government, and then, the parties thereto will make settlements for an electricity price based on the difference between the strike price, which is provided under the agreement, and the reference price, which is determined according to wholesale market prices from time to time.

*4 CCGT: Combined Cycle Gas Turbine

*5 PJM: The independent system operator in the Eastern US that operates the largest wholesale electricity market in the US as well as runs its electric power system.

Project	Overview	Location of the project
---------	----------	-------------------------

Central Java (Indonesia)

Capacity: 2,000MW
(1,000MW x 2)
Type: Coal-fired (USC)
Ownership: 34%
Status: Under construction
Start of operation*
No.1: Jun. 2020
No.2: Dec. 2020
* Possibly delayed by a few months

- 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 in Batang city, Central Java Province.
- After startup of operation, the plant will sell electricity to Indonesia's state-owned electric power utility for a period of 25 years.



Triton Knoll (UK)

Capacity: 857MW
Type: Offshore wind
Ownership: 25%
Status: Under construction
Start of operation: 2021

- Participating in an overseas offshore wind power project from the construction phase.
- A fixed price is guaranteed for 15 years under UK CfD regime.
- Taking advantage of the expertise regarding offshore wind power business obtained by participating in this project, J-POWER will accelerate its commitment to promoting its renewable energy business across the world, including Japan.



Jackson (USA)

Capacity: 1,200MW
Type: CCGT
Ownership: 100%
Status: Under construction
Start of operation: 2022

- Concluded in June 2019 to construct a new power plant next to Elwood plant now under operation
- A greenfield project to build a power plant from scratch
- Close to Chicago, a high power-demand area
- Electricity is sold in the PJM market

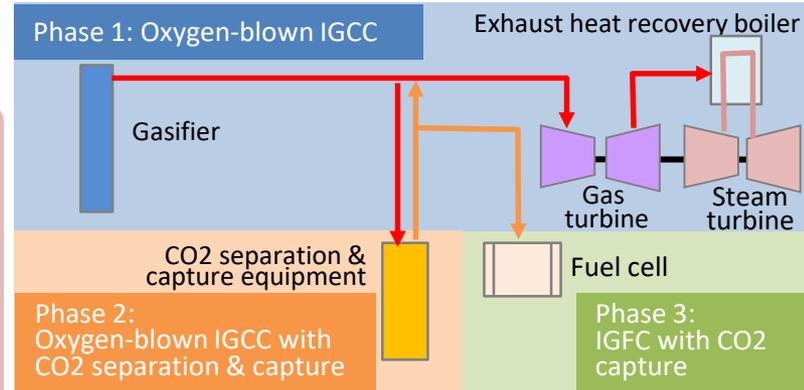


Initiatives for Realizing Zero Emission in Coal Use

Osaki CoolGen Project (Refer to the next page for details)

- Large-scale demonstration test on high-efficiency coal-fired thermal power (oxygen-blown IGCC, IGFC) and CO2 separation and capture aiming for commercialization

- IGCC (Integrated Coal Gasification Combined Cycle): 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 and others is used to drive a steam turbine. There are oxygen-blown type and air-blown type depending on kind of gas supplied to gasifier when coal is gasified. Oxygen-blown IGCC is said to be more efficient when operated with CO2 separation and capture facilities
- IGFC (Integrated Coal Gasification Fuel Cell Combined Cycle): Power generation system combining fuel cells with gas and steam turbines in a triply integrated configuration, which will be able to achieve the highest efficiency as a coal-fired generation technology



Considering carbon recycling projects

- Considering carbon recycling to utilize CO2 captured in Osaki CoolGen Project



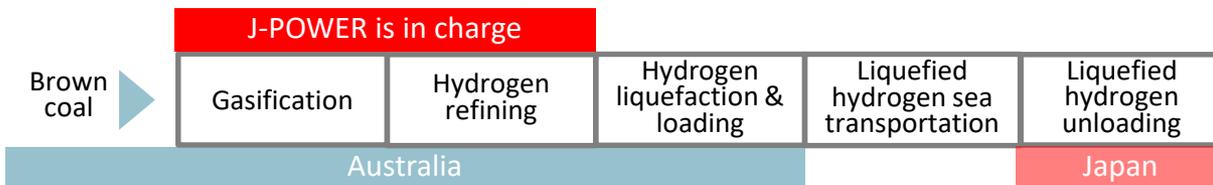
CO2 supply



- Jointly operated by J-POWER and KAGOME in Kitakyushu city
- Utilizing thousands tons of CO2 annually to promote tomato photosynthesis

Australian Brown Coal Hydrogen Pilot Test Project

- Participating in demonstration test of constructing supply chain which produces hydrogen by gasifying brown coal in Australia and transports it to Japan
- J-POWER utilizes its knowledge on coal gasification to be in charge of brown coal gasification*1 and hydrogen refining facilities which have been under construction from November 2019
- When commercialized in the future, CO2 free will be achieved by applying CCS to store CO2 generated in hydrogen production



Completion rendering of brown coal gasification and hydrogen refining facilities
Source: HySTRA

*1 Sponsored by the New Energy and Industrial Technology Development Organization (NEDO)

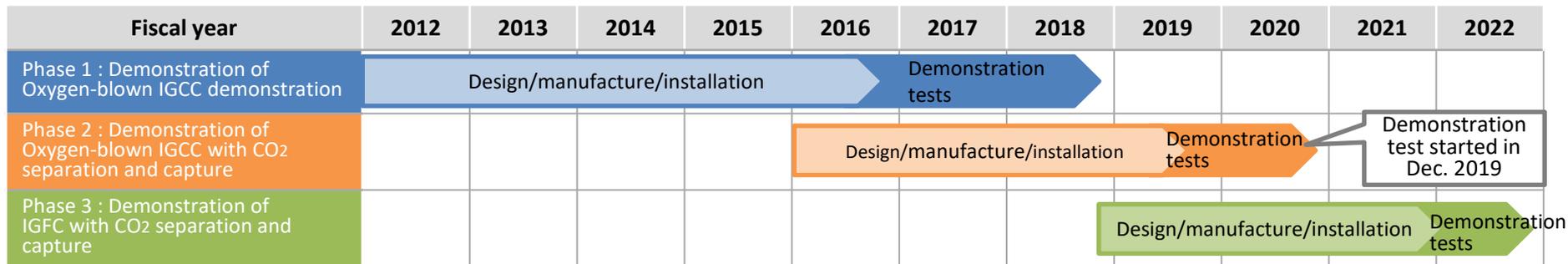
➤ Large-scale demonstration test on oxygen-blown IGCC, IGFC and CO₂ separation and capture to verify total system performance aiming for commercialization*

*This demonstration test is subsidized by the New Energy and Industrial Technology Development Organization (NEDO)

Company	Osaki CoolGen Corporation (Ownership: J-POWER 50%, Chugoku Electric Power Company 50%)		Output	166MW
Location	Chugoku Electric Power Company Osaki Power Station premises (Hiroshima)	Generation type	Oxygen-blown IGCC (Gas turbine: 1,300°C class)	



Demonstration Test Schedule



Phase 1 demonstration tests completed in February 2019, achieving targets in all testing items

- ◆ Net efficiency reached 40.8% (HHV) (gross efficiency 48.1%), which stands at world top level as 170 MW-class demonstration plant
⇒ Gaining perspective for approx. 46% of net efficiency (approx. 53% of gross efficiency) at an oxygen-blown IGCC commercial plant with 1500°C-class gas turbine, which enables CO₂ emission reduction by around 15% compared with USC (USC is currently the most efficient commercialized coal-fired thermal power)
- ◆ Results of load change rate approx. 16%/minute*¹ and stable operation at 0MW net output*² prove quick output control ability
⇒ Demonstrating high flexibility in operation, which enables supplement for sudden output changes in renewables

*1 Output change rate to rated load per minute. Larger figure shows higher ability of quick output change in response to change of electricity demand.

*2 Net output represents MW of generator minus MW consumed in the plant itself. 0MW net output means generating the same volume of electricity as consumed in the plant.

Consolidated: Revenues and Expenses



(Unit: 100 million yen)

	FY2015	FY2016	FY2017	FY2018	FY2018 3Q	FY2019 3Q
Operating revenue	7,800	7,444	8,562	8,973	6,599	6,760
Electric utility operating revenue	5,708	5,385	6,319	6,937	5,093	5,098
Overseas business operating revenue	1,559	1,498	1,630	1,410	1,068	1,306
Other business operating revenue	532	559	612	625	438	355
Operating expenses	6,921	6,626	7,519	8,185	5,822	6,077
Operating income	879	817	1,043	788	777	682
Non-operating revenue	178	205	291	188	173	204
Share of profit of entities accounted for using equity method	108	132	97	96	92	91
Other	69	72	193	92	80	113
Non-operating expenses	472	351	309	292	217	217
Interest expenses	304	297	283	263	199	196
Other	167	53	25	28	18	21
Ordinary income	585	671	1,024	685	732	669
Extraordinary income	-	-	-	-	-	-
Extraordinary losses	-	-	33	-	-	89
Profit attributable to owners of parent	400	414	684	462	517	387

Non-consolidated: Revenues and Expenses



(Unit: 100 million yen)

	FY2015	FY2016	FY2017	FY2018	FY2018 3Q	FY2019 3Q
Operating revenue	5,523	5,224	6,145	6,469	4,847	4,241
Electric power business	5,430	5,109	6,014	6,336	4,742	4,182
Sold power to other suppliers	4,902	4,579	5,456	5,806	4,346	3,785
Transmission and other	527	529	558	529	396	396
Incidental business	93	115	131	133	104	59
Operating expenses	5,107	4,948	5,715	6,282	4,492	3,970
Electric power business	5,023	4,842	5,593	6,157	4,393	3,917
Personnel expense	318	436	342	324	241	264
Amortization of the actuarial difference in retirement benefits	(23)	107	(1)	(14)	(10)	18
Fuel cost	2,184	1,968	2,573	2,890	2,139	1,724
Repair and maintenance cost	583	683	634	697	501	521
Depreciation and amortization cost	734	496	534	510	381	393
Other	1,202	1,257	1,508	1,734	1,130	1,013
Incidental business	84	105	122	125	98	53
Operating income	415	276	430	186	355	270

Consolidated: Segment Information



(Unit: 100 million yen)

		Electric power	Electric power -related	Overseas	Other	Subtotal	Elimination*	Consolidated
FY2019	Sales	5,111	2,601	1,306	151	9,170	(2,410)	6,760
3Q	Sales to customers	5,098	231	1,306	123	6,760	-	6,760
	Ordinary income	256	111	294	5	667	2	669
FY2018	Sales	5,107	3,167	1,068	207	9,550	(2,950)	6,599
3Q	Sales to customers	5,093	254	1,068	183	6,599	-	6,599
	Ordinary income	315	151	258	10	734	(2)	732
year-on-year change	Sales	4	(566)	237	(56)	(379)	539	160
	Sales to customers	5	(22)	237	(60)	160	-	160
	Ordinary income	(58)	(39)	36	(5)	(67)	4	(63)

“Electric Power Business”

Mainly J-POWER group’s electric power generation business and transmission/ transformation business. The majority of consolidated revenue is derived from this segment.

“Electric Power-Related business”

This focuses 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

* Elimination includes elimination of intersegment sales

Consolidated: Cash Flow



(Unit: 100 million yen)

	FY2015	FY2016	FY2017	FY2018	FY2018 3Q	FY2019 3Q
Operating activities	1,461	1,154	1,603	1,484	1,007	961
Profit before income taxes	584	671	990	685	732	579
Depreciation and amortization	945	756	822	799	599	609
Share of (profit) loss of entities accounted for using equity method	(108)	(132)	(97)	(96)	(92)	(91)
Investing activities	(1,315)	(1,376)	(1,096)	(1,704)	(1,445)	(1,067)
Purchase of non-current assets	(1,408)	(1,081)	(988)	(1,060)	(722)	(946)
Payments of investment and loans receivable	(25)	(180)	(81)	(744)	(749)	(106)
Free cash flow	145	(222)	506	(220)	(438)	(106)

Consolidated: Key Ratios and Key Data



(Unit: 100 million yen)

	FY2015	FY2016	FY2017	FY2018	FY2018 3Q	FY2019 3Q
(PL) Operating revenue	7,800	7,444	8,562	8,973	6,599	6,760
Operating income	879	817	1,043	788	777	682
Ordinary income	585	671	1,024	685	732	669
Profit attributable to owners of parent	400	414	684	462	517	387
(BS) Total assets	25,407	26,062	26,470	27,661	27,975	27,887
Construction in progress	4,410	4,761	5,257	5,820	5,460	6,337
Shareholders' equity	6,665	7,238	7,872	7,974	8,241	7,952
Net assets	6,754	7,640	8,361	8,455	8,775	8,454
Interest-bearing debt	16,287	16,200	15,613	16,428	16,754	16,634
(CF) Investing activities	(1,315)	(1,376)	(1,096)	(1,704)	(1,445)	(1,067)
Free cash flow	145	(222)	506	(220)	(438)	(106)
(Ref) Non-consolidated CAPEX*1	(1,063)	(998)	(941)	(889)	(611)	(514)
(Ref) Non-consolidated depreciation	734	496	534	510	381	393
ROA (%)	2.3	2.6	3.9	2.5	-	-
ROA (ROA excl. Construction in progress) (%)	2.8	3.2	4.8	3.2	-	-
ROE (%)	5.9	6.0	9.1	5.8	-	-
EPS (¥)	218.97	226.33	373.93	252.68	282.54	211.66
BPS (¥)	3,641.59	3,954.22	4,300.98	4,356.54	4,502.08	4,344.43
Shareholders' equity ratio (%)	26.2	27.8	29.7	28.8	29.5	28.5
D/E ratio (x)	2.4	2.2	2.0	2.1	2.0	2.1
Number of shares issued*2 (thousand)	183,049	183,049	183,049	183,048	183,049	183,048

*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)

Monthly Electricity Sales:

Domestic Power Generation Business (Thermal Power)



▶ Apr. 2018 - Dec. 2018 Results (Cumulative)

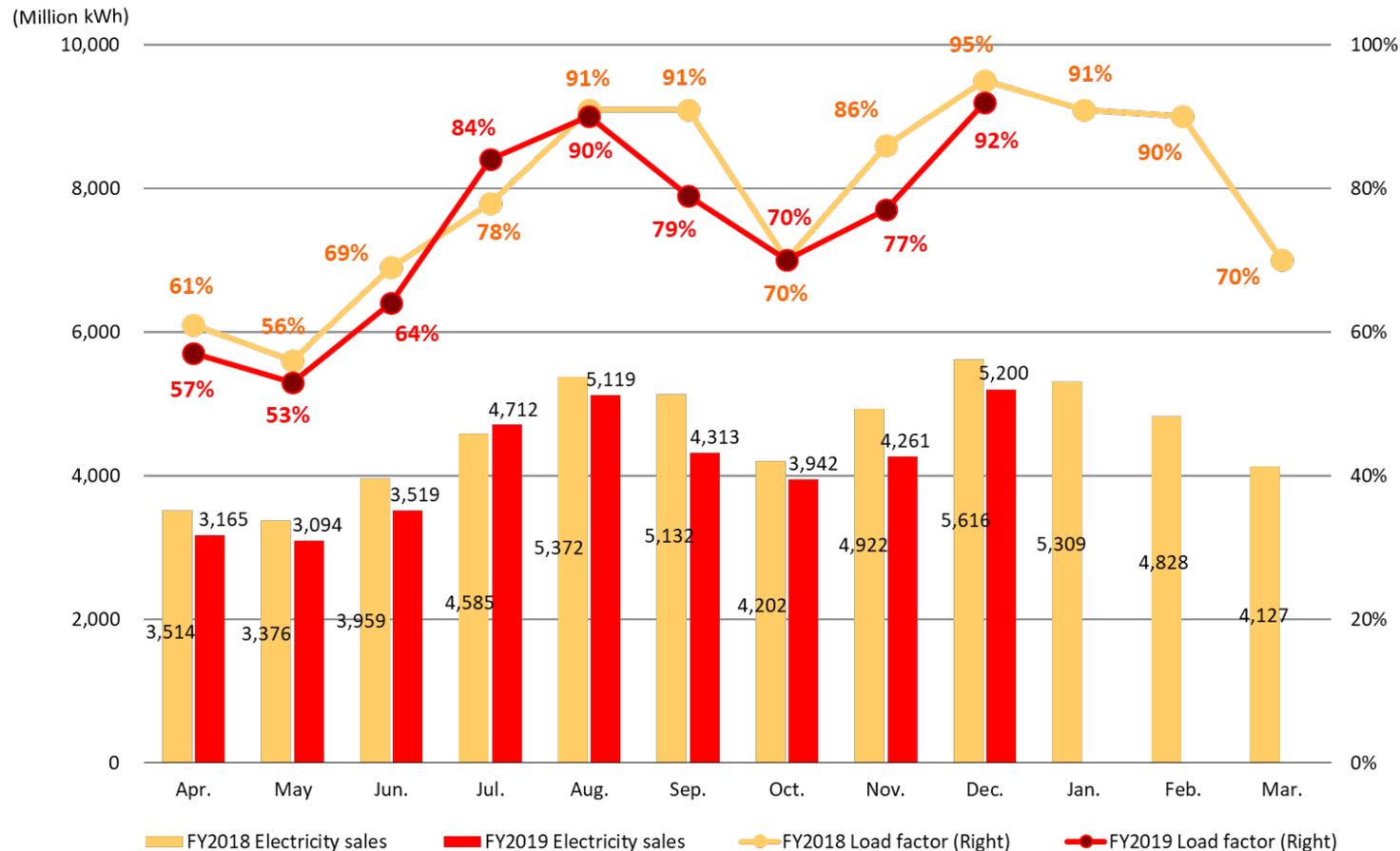
Load factor ⇒ 78%

Electricity sales ⇒ 40.6 TWh

▶ Apr. 2019 - Dec. 2019 Results (Cumulative)

Load factor ⇒ 74%

Electricity sales ⇒ 37.3 TWh



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

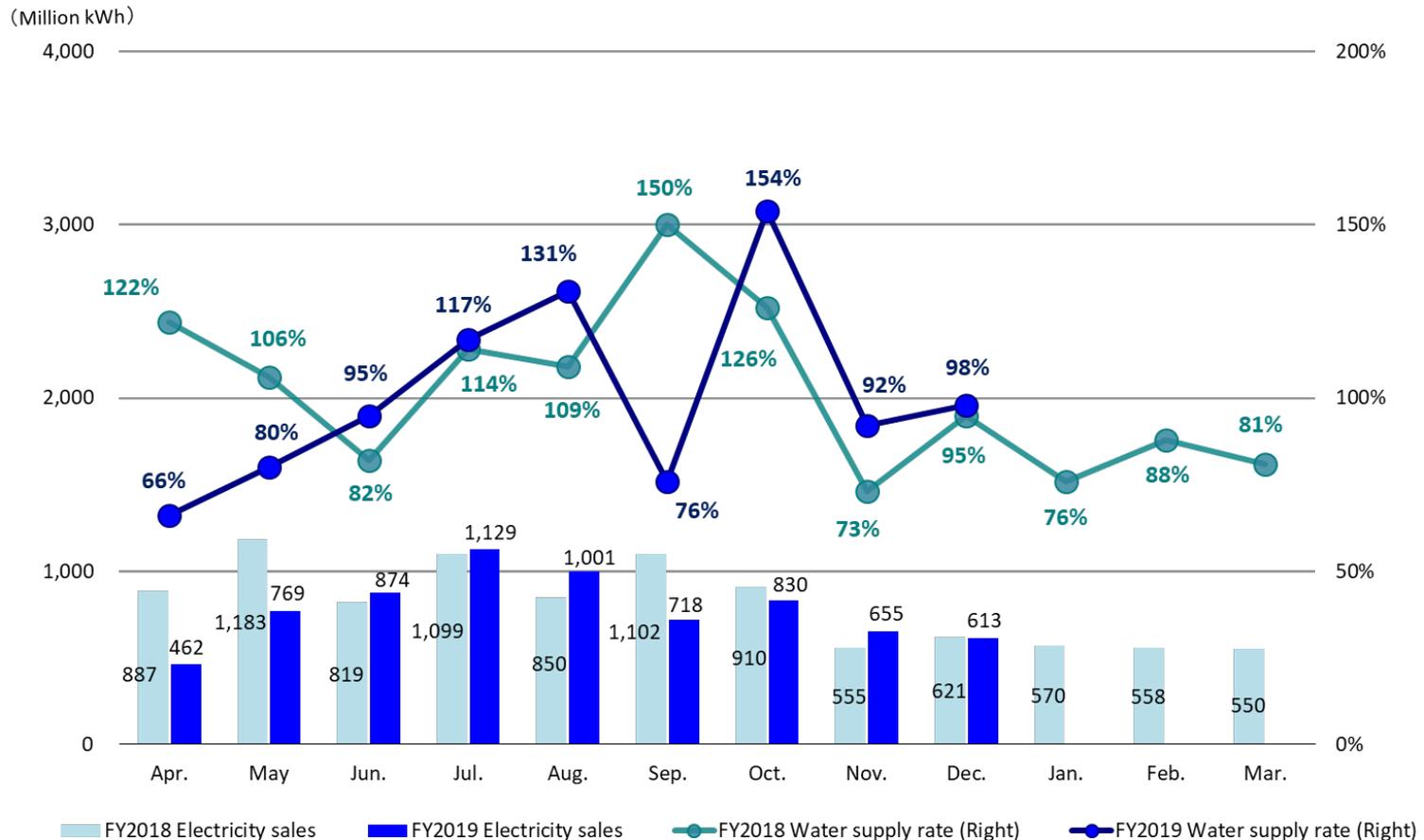
* Proportion of equity holding is not taken into account.

Monthly Electricity Sales:



Domestic Power Generation Business (Hydroelectric Power)

- | | |
|--|--|
| ▶ Apr. 2018 - Dec. 2018 Results (Cumulative) | ▶ Apr. 2019 - Dec. 2019 Results (Cumulative) |
| Water supply rate ⇒ 110% | Water supply rate ⇒ 98% |
| Electricity sales ⇒ 8.0 TWh | Electricity sales ⇒ 7.0 TWh |



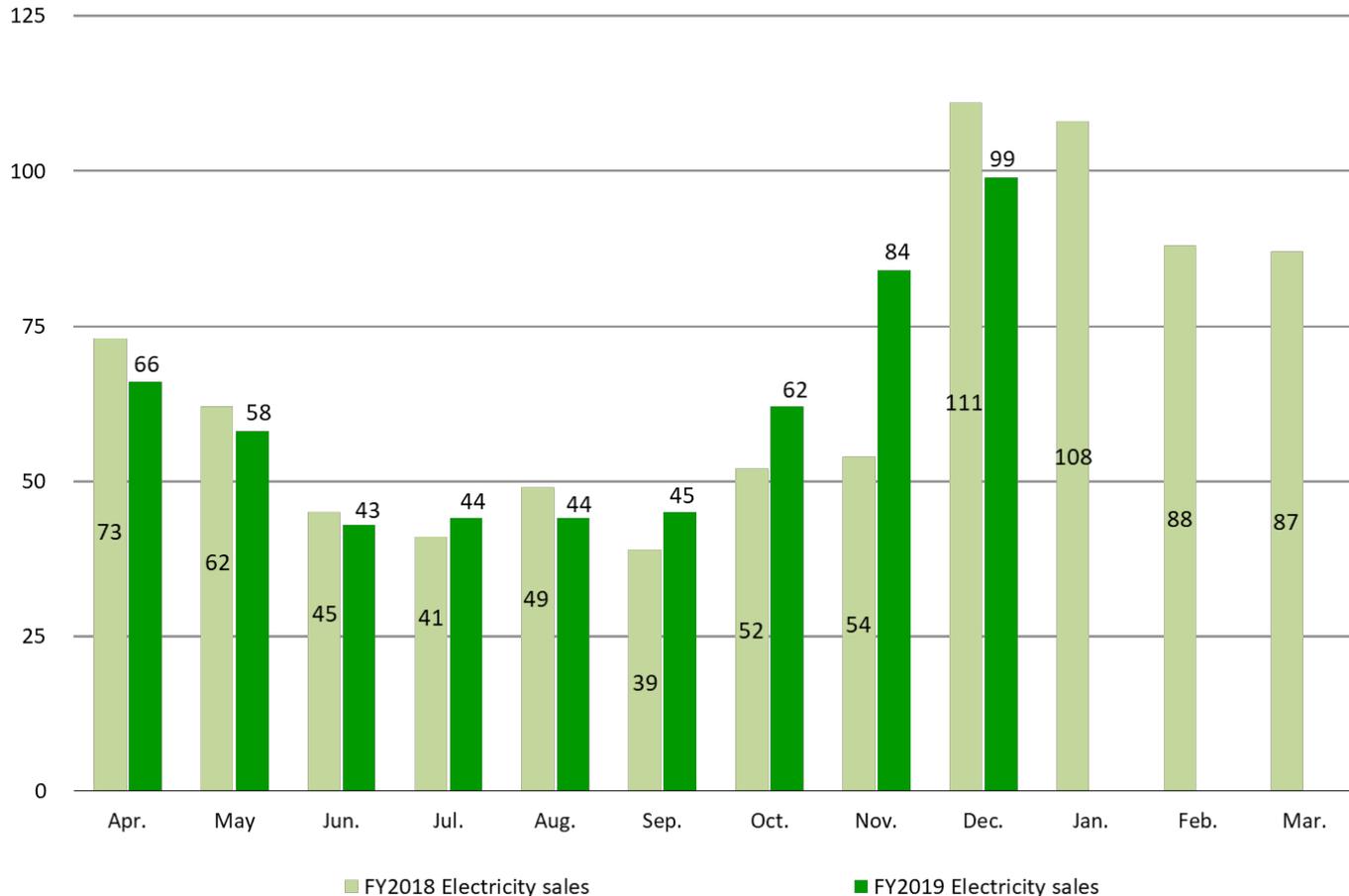
Monthly Electricity Sales:

Domestic Power Generation Business (Wind Power)



- ▶ Apr. 2018 - Dec. 2018 Results (Cumulative) ⇒ 0.53 TWh
- ▶ Apr. 2019 - Dec. 2019 Results (Cumulative) ⇒ 0.54 TWh

(Million kWh)



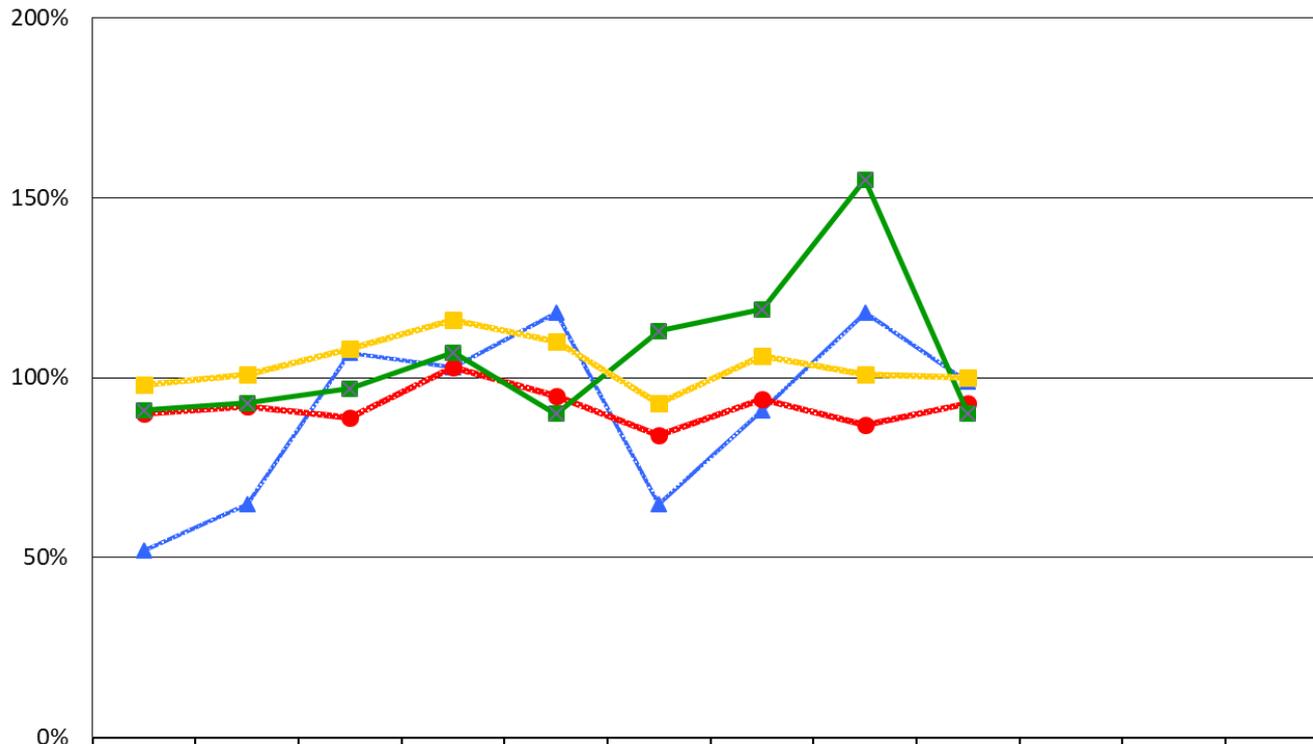
* Proportion of equity holding is not taken into account.

Change in Monthly Electricity Sales:

Domestic Power Generation Business



- ▶ Apr. 2018 - Dec. 2018 Total Results (Cumulative) ⇒ 51.3 TWh
- ▶ Apr. 2019 - Dec. 2019 Total Results (Cumulative) ⇒ 53.2 TWh



	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. - Dec.
▲ Year-on-year (Hydro)	52%	65%	107%	103%	118%	65%	91%	118%	99%				88%
● Year-on-year (Thermal)	90%	92%	89%	103%	95%	84%	94%	87%	93%				92%
■ Year-on-year (Wind)	91%	93%	97%	107%	90%	113%	119%	155%	90%				104%
■ Year-on-year Total	98%	101%	108%	116%	110%	93%	106%	101%	100%				104%

* Total volume includes electricity sales volume of hydro, thermal, wind and electricity procured from wholesale electricity market, etc.



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