

# Management Overview

**November 2018**



The Okinawa Electric Power Company, Inc.

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# Overview of Okinawa Prefecture



## **Basic Data**

Population:	1,447,488
No. of Households	592,155
Area	2,281 km <sup>2</sup>
Climate	Subtropical
Location	26° 12'N 127° 41'E
Prefectural GDP	¥4313.0billion
Tourism Revenue	¥697.9billion

- ◇ 160 islands scattered over a sea area lying about 1,000 kilometers east and west and about 400 kilometers north and south.
- ◇ Okinawa has attracted attention for its advantages and potentials.
  - Geographical characteristics as being located in the center of East Asia.
  - The highest birth rate in Japan.
  - Rich nature and mild climate.
- ◇ Making good use of such advantages and potentials, initiatives are underway
  - Promotion of tourism.
  - Clustering of international logistics industry.

Population, No. of Households as of September 1, 2018

Area as of October 1, 2017

Prefectural GDP as of Estimated results FY 2017

Tourism Revenue as of FY 2017

(Source: Okinawa Prefecture, Geographical Survey Institute )



The Okinawa Electric Power Company, Inc.

# Corporate Overview of OEPC

- The Okinawa Electric Power Company (OEPC) supplies electricity to 38 inhabited islands including Okinawa main island.
- OEPC maintains 11 isolated systems that are not connected with the transmission lines of other power companies.
- OEPC has no nuclear and hydroelectric power plants and depends on fossil fuels for its power supply.

Established	May 15, 1972
Capital	¥7,586 million
Total assets	¥375.163 billion (Non-consolidated) ¥402.088 billion (Consolidated)
Employees	1,535 (Consolidated: 2,676)

Security code	9511
Service area	Okinawa Prefecture
Generating facilities	Steam-power generators 5 locations 1,629 thousand kW (Oil 2 locations 375 thousand kW) (Coal 2 locations 752 thousand kW) (LNG 1 locations 502 thousand kW) Gas turbine generators 5 locations 326 thousand kW Internal-combustion power generators 13 locations 191 thousand kW Wind power generators 5 locations 2 thousand kW Total 2,148 thousand kW

(as of March 31, 2018)

## Ratings

Rating agency	S&P	Moody's	R&I
Rating	A+	A1	AA
Outlook (direction)	Positive	Stable	Stable

\* Ratings on long-term preferred debts as of October 31, 2018



# Financial Results for FY2018 2Q YTD (Year-on-Year Comparison)

(Unit: million yen, X)

	Consolidated (A)			Non-consolidated (B)			(A) / (B)	
	FY2017 2Q YTD (Results)	FY2018 2Q YTD (Results)	Rate of Change	FY2017 2Q YTD (Results)	FY2018 2Q YTD (Results)	Rate of Change	FY2017 2Q YTD (Results)	FY2018 2Q YTD (Results)
Sales	105,078	109,593	+4.3%	101,664	105,776	+4.0%	1.03	1.04
Operating income	11,115	5,590	-49.7%	10,967	5,419	-50.6%	1.01	1.03
Ordinary income	10,414	5,096	-51.1%	10,537	5,217	-50.5%	0.99	0.98
Net income	8,255*	3,921*	-52.5%	8,434	4,124	-51.1%	0.98	0.95

\* Net income attributable to owners of parent.

## Consolidated and Non-consolidated : Increase in Sales, Decrease in Income (the first time in 4 years)

### 【Revenue】

- Increase in Sales due to increase in income from the Fuel cost adjustment system in Electric business.
- Decrease in Electricity sales volume in Electric business.

### 【Expenditure】

- Increase in Fuel costs, Purchased power costs and Repair and maintenance costs in Electric business.



# Annual Outlook Summary FY2018 (1/3)

(Unit: million yen, X)

	Consolidated(A)				Non - Consolidated(B)				(A) / (B)	
	FY2017 (Results)	FY2018 (Forecasts)		Change (II) - (I)	FY2017 (Results)	FY2018 (Forecasts)		Change (II) - (I)	FY 2017 (Results)	FY 2018 (Forecasts)
		Announced In Jul. 2018 (I)	Announced In Oct. 2018 (II)			Announced In Jul. 2018 (I)	Announced In Oct. 2018 (II)			
Sales	196,134	207,300	207,800	+500	188,075	197,300	198,300	+1,000	1.04	1.05
Operating income	9,333	7,800	6,300	-1,500	7,160	6,400	4,900	-1,500	1.30	1.29
Ordinary income	8,381	6,700	5,200	-1,500	6,322	5,500	4,000	-1,500	1.33	1.30
Net income	6,273*	5,100*	3,800*	-1,300	5,106	4,400	3,100	-1,300	1.23	1.23

\* Net income attributable to owners of parent.

**Consolidated and Non-consolidated :Increase in Sales ,Decrease in Income(the first time in 6 years)**

**[ Comparison with previous forecasts (Jul.2018) ]**

**【Revenue】**

- Increase in Electricity sales due to increase in income from the Fuel cost adjustment system in Electric business.
- Decrease in Sales to outside customers in consolidated subsidiaries.

**【Expenditure】**

- Increase in Fuel costs, Purchased power costs and Repair and maintenance costs in Electric business.



# Annual Outlook Summary FY2018 (2/3)

- Increase in Fuel costs and Purchased power costs due to unplanned repair and stoppage of Kin Thermal Power Plant (coal) .

## ■ Unplanned repair and stoppage of Kin Thermal Power Plant (coal)

### Overview

- Steam pipes in the boiler were partially damaged and repair work including pipe replacement was carried out.
- Increase in Fuel costs and Purchased power costs due to shift to LNG and oil thermal power plants, other company (coal).

### Stop period due to repair

- Generator No.1: June 28-August 9 (43 days)
- Generator No.2 : August 8-September 21 (45 days)

Comparison of forecasts for power generated and received  
(Comparison with previous forecasts (Jul.2018) )

(Unit : million kWh)

		FY2018( Forecasts)				Change	
		July.2018		Oct.2018			
		Electricity generated	Composition ratio	Electricity generated	Composition ratio	Electricity generated	Composition ratio
OPEC	Coal	3,370	42.3%	3,170	40.0%	-200	-2.3pt
	Oil	1,127	14.1%	1,154	14.6%	+27	+0.5pt
	LNG	1,545	19.4%	1,599	20.2%	+54	+0.8pt
	Total	6,042	75.8%	5,923	74.8%	-119	-1.0pt
Other company (Coal)		1,443	18.1%	1,528	19.3%	+85	+1.2pt
Other		490	6.1%	464	5.9%	-26	-0.2pt
Total		7,975	100.0%	7,915	100.0%	-60	-



# Annual Outlook Summary FY2018 (3/3)

- Increase in Repair and maintenance costs due to the restoration of damage caused by Typhoon No.24.

## ■ Damage caused by Typhoon No.24

### Overview

- Typhoon No.24 hit the Okinawa region from September 28 through 30.
- Since the Okinawa region was in the storm area of wind speed 25m/s or more for a long time, distribution facilities suffered extensive damage. (Okinawa main island : Approx.27 hours, Miyako island : Approx.17 hours)

[Maximum wind speed]

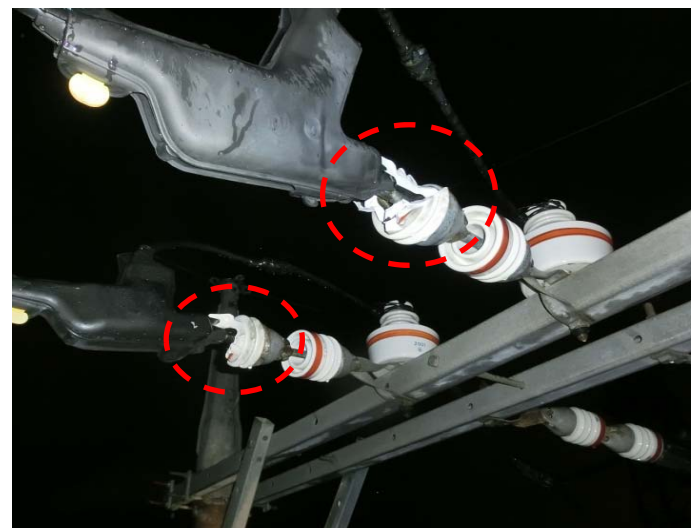
Naha city : 53.1m/s; Nanjo city : 56.2m/s [Reference] Gushikawa Thermal Power Plant : 73.1m/s

### Comparison with typhoons that hit in past decade

	Maximum number of blackout houses		Maximum blackout hours
1	2012 No.17 : 334 thousand	1	2018 No.24 : Approx.108 hours
2	2011 No.2 : 278 thousand	2	2012 No.17 : Approx. 84 hours
3	2018 No.24 : 250 thousand	3	2015 No.21 : Approx. 81 hours

### Extent of damage to facilities (main island)

	Number of broken utility poles	Number of broken insulators and others
2018 No.24	17	Approx.2,900
2012 No.17	72	Approx. 370



\*Broken insulators





# Electric Energy Demand (Results)(1/3)

## Electricity Sales Volume

(Unit: million kWh, %)

	FY2017 2Q YTD (Results)	FY2018 2Q YTD (Results)	Change	Rate of Change
Lighting	1,692	1,639	-53	-3.1
Power	2,505	2,474	-31	-1.2
Total	4,197	4,113	-84	-2.0

## <Lighting>

Although number of customers increased, the demand for Lighting decreased Year-on-Year due to lower summer temperature compared with previous year when it was extremely hot.

## <Power>

The demand for Power decreased Year-on-Year due to switching to other suppliers and lower summer temperature compared with previous year when it was extremely hot.

## <Power Generation Infrastructure>

- The maximum electric power output decreased 5,705kW.\*

Miyako power plant No.10	: -4,500kW
Kumejima power plant No.9	: -2,000kW
Shin tarama power plant No.4	: -230kW
Shin tarama power plant No.5	: -200kW
Tonaki power plant No.1	: -75kW
Yonaguni power plant No.10	: +1,000kW
Shin tarama power plant No.8	: +300kW

## ■ Power Generation Infrastructure and Power Generated and Received

(Unit: million kWh, thousand kW)

		FY2017 2Q YTD		FY2018 2Q YTD			
		Electricity generated	Com- position ratio	Electricity generated	Com- position ratio	Maximum output	Com- position ratio
OEPC	Coal	1,905	42.2%	1,633	37.1%	752	30.6%
	Oil	688	15.3%	640	14.5%	856	34.8%
	LNG	876	19.4%	923	21.0%	537	21.9%
	Total	3,469	76.9%	3,196	72.6%	2,145	87.3%
Other company (coal)		781	17.3%	925	21.0%	312	12.7%
Other		261	5.8%	284	6.4%	-	-
Total		4,511	100.0%	4,405	100.0%	2,457	100.0%

## <Power Generated and Received>

- Power generated and received was 4,405 million kWh, down 2.4%.\*
- Ratio of OEPC's coal-fired thermal power was down 5.1 points.\*
- Ratio of Other company's coal-fired thermal power was up 3.7 points.\*
- Ratio of LNG-fired thermal power was up 1.6 points.\*
- Ratio of oil-fired thermal power was down 0.8 points.\*

\*Comparison with the same period of the previous year.



# Electric Energy Demand (Results)(2/3)

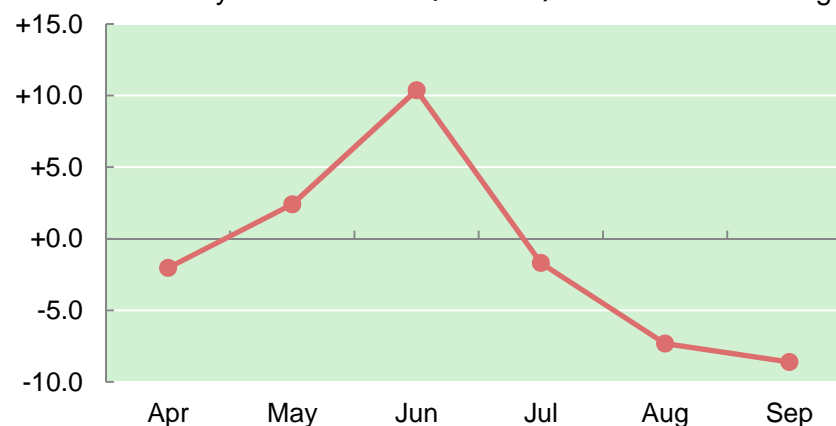
- Electricity sales volume for the first half of FY2018 stood at 4,113 million kWh, a decrease of 2.0% year on year.
- Average temperature during FY 2018 2Q (from July to September) was 1.3°C lower than the previous year; temperature in July and August was lower than the average year.

## Electricity sales volume

(Unit: million kWh,%)

	Apr	May	Jun	Jul	Aug	Sep	1st half
FY2018 Results	539	558	693	743	778	802	4,113
FY2017 results	550	545	627	756	841	878	4,197
Rate of Change	-2.0	+2.4	+10.4	-1.7	-7.3	-8.6	-2.0

(%) Electricity sales volume (FY2018) YoY Rate of Change

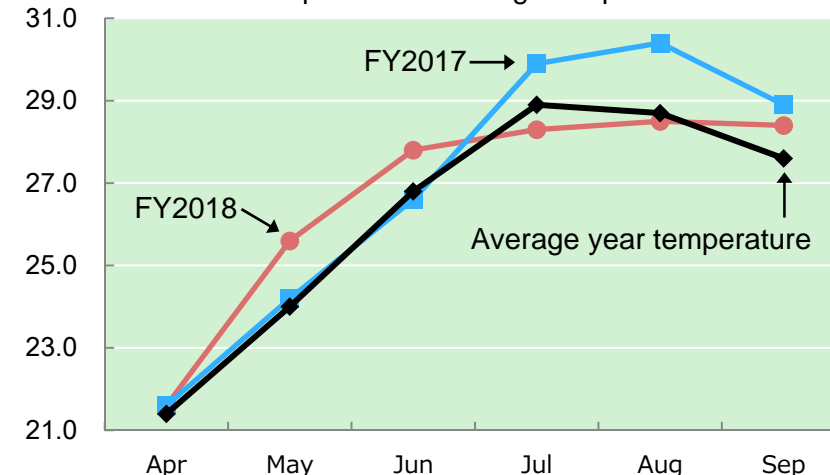


## Average temperature

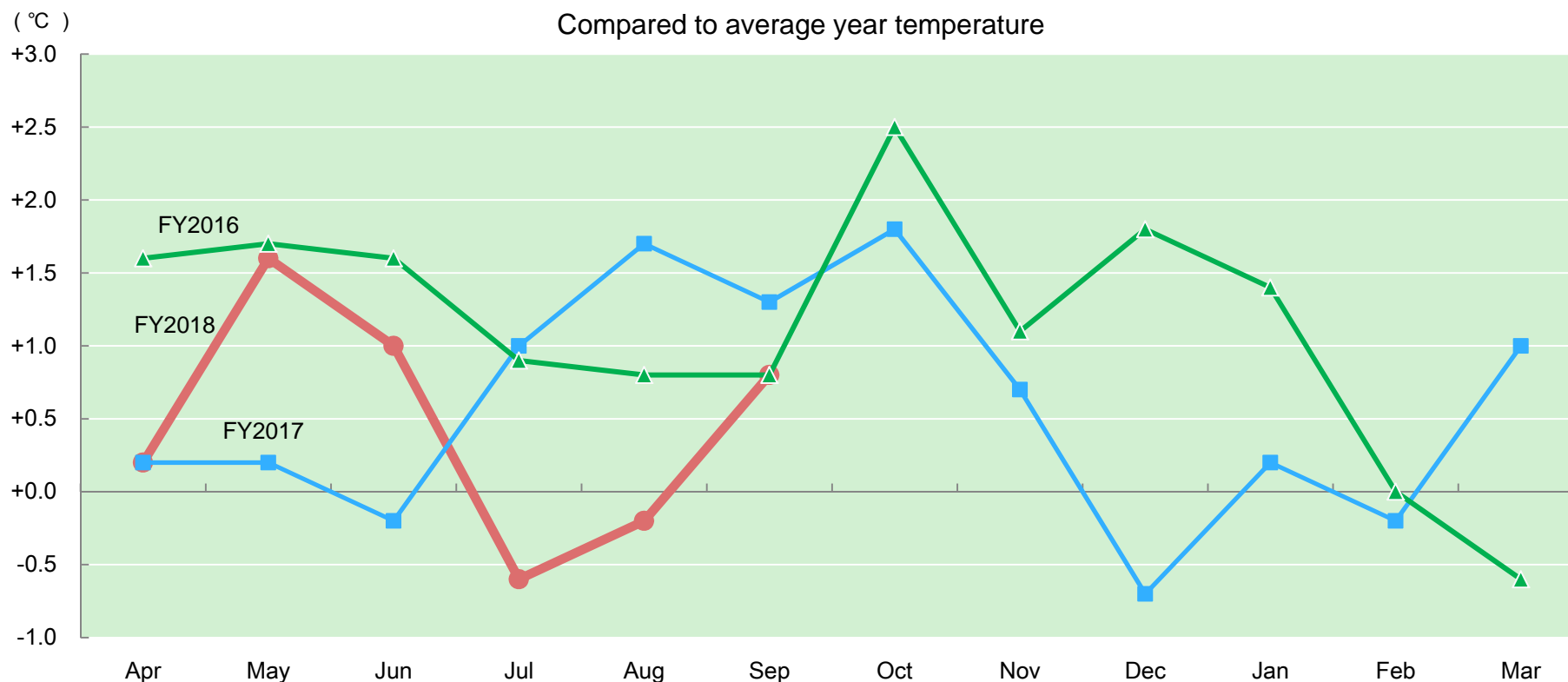
(Unit: °C)

	Apr	May	Jun	Jul	Aug	Sep	1st half
FY2018 (Compared to average year temperature)	21.6 (+0.2)	25.6 (+1.6)	27.8 (+1.0)	28.3 (-0.6)	28.5 (-0.2)	28.4 (+0.8)	26.7 (+0.5)
FY2017 (Compared to average year temperature)	21.6 (+0.2)	24.2 (+0.2)	26.6 (-0.2)	29.9 (+1.0)	30.4 (+1.7)	28.9 (+1.3)	26.9 (+0.7)
Average year temperature	21.4	24.0	26.8	28.9	28.7	27.6	26.2

(°C) Comparison of average temperature



# Electric Energy Demand (Results)(3/3)



Average temperature

(Unit:°C)

	Apr	May	Jun	Apr-Jun	Jul	Aug	Sep	Jul-Sep	1st half	Oct	Nov	Dec	Oct-Dec	Jan	Feb	Mar	Jan-Mar	2nd half	FY
FY2018	21.6	25.6	27.8	25.0	28.3	28.5	28.4	28.4	26.7	-	-	-	-	-	-	-	-	-	-
FY2017	21.6	24.2	26.6	24.1	29.9	30.4	28.9	29.7	26.9	27.0	22.8	18.0	22.6	17.2	16.9	19.9	18.0	20.3	23.6
FY2016	23.0	25.7	28.4	25.7	29.8	29.5	28.4	29.2	27.5	27.7	23.2	20.5	23.8	18.4	17.1	18.3	17.9	20.9	24.2
Average year temperature	21.4	24.0	26.8	24.1	28.9	28.7	27.6	28.4	26.2	25.2	22.1	18.7	22.0	17.0	17.1	18.9	17.7	19.8	23.0



# Electric Energy Demand (FY2018 and Long-term Outlook)

## Electricity sales volume (FY2018 Outlook)

(Unit: million kWh, %)

	FY2017 Results	FY2018 Forecasts	YoY Rate of Change
Lighting	3,140	3,046	-3.0
Power	4,621	4,528	-2.0
Total	7,761	7,574	-2.4

## Electricity sales volume (Long-term Outlook)

(Unit: million kWh, %)

	FY2006 Results	FY2016 Results	FY2027 Forecasts	2006-2016 Annual average growth rate	2016-2027 Annual average growth rate
Lighting	2,881	3,115	3,188	0.8 (0.5*)	0.2 (0.5*)
Power	4,495	4,698	4,707	0.4 (0.1*)	0.0 (0.4*)
Total	7,376	7,813	7,895	0.6 (0.3*)	0.1 (0.5*)

\* Adjusted for the influence of temperature.

### (Lighting)

Demand for lighting is expected to be lower year-on-year due to reactionary fall from an increase in the demand caused by high temperatures in the previous summer although demand is expected to increase due to an increase in the number of customers.  
(YoY growth:-3.0%)

### (Power)

Demand for power is expected to be lower than the previous year, due to a reactionary fall from demand due to high temperature in the summer of last year and a decrease in demand due to switching to other suppliers.  
However is expected to be increase in the number of commercial and other facilities and the construction-related demand (steel industry and ceramic industry).(YoY growth:-2.0%)

### (Total)

As explained above, the total electricity sales volume is expected to be 7,574 million kWh, short of the previous year.  
(YoY growth:-2.4%)

### (Lighting)

Demand for lighting is expected to increase moderately owing to an increase in the number of customers resulting from growth in the number of population and households.  
(Annual average growth:0.5%\*)

### (Power)

Demand for power is expected to grow modestly due to increase in the number of commercial and other facilities as well as larger livelihood-related demand (food manufacturing,etc.) in the background of increases in the population and tourists,although despite to impact of contract switching to other suppliers.  
(Annual average growth:0.4%\*)

### (Total)

As explained above, the total electricity sales volume is expected to be 7,895 million kWh, marking a moderate increase.  
(Annual average growth:0.5%\*)



# Capital Expenditures Plan (Electric Business)

- Capital investment in FY 2018 is expected to be around 25 billion yen.
- Large-scale power source development is not planned for the next few years.
- Although costs for responding to aging of supply facilities are expected to increase, efforts are made to level off investment amounts.

## Trends in the Capital Investment Amount

(Unit: 100million yen)

FY By facilities		2013 【Results】	2014 【Results】	2015 【Results】	2016 【Results】	2017 【Results】	2018
Power sources		126	109	40	29	34	41
Supply facilities	Transmission	32	37	51	56	39	88
	Transformation	40	37	22	35	21	32
	Distribution	51	58	51	59	59	79
	Subtotal	124	133	125	151	120	200
Others		18	2	17	11	14	7
Total		268	245	184	193	168	247

Note: The figures may not exactly match the figures because of rounding.

### [Major Projects in Upcoming Capital Investments]

Supply facilities: Expansion of Tomoyose Substation



# Business environment and challenges

Item	Overview and Challenges
Sales	<ul style="list-style-type: none"><li>■ The business environment including increase in population and tourists remains the same.</li><li>■ However, the growth in power demand will slow down.</li><li>■ Challenges will be sales expansion of electricity and gas.</li></ul>
Profitability	<ul style="list-style-type: none"><li>■ Due to shift from coal to LNG, burden of fuel cost reduces profit.</li><li>■ A challenge will be to improve profitability.</li><li>■ The cost structure must be reviewed.</li></ul>
CF	<ul style="list-style-type: none"><li>■ No large-scale electric power development is planned for the time being.</li><li>■ A certain level of free cash flow will be secured.</li><li>■ The Company has a certain capacity for additional investment.</li></ul>
Capital composition	<ul style="list-style-type: none"><li>■ Interest-bearing debt is diminishing.</li><li>■ Equity capital is secured at the level necessary for financial stability.</li><li>■ A challenge is to improve capital efficiency.</li></ul>



# The OEPC Group

## Medium- to long-term growth strategy

### 1. What we at the OEPC Group aim to be

The OEPC Group Vision sets out our vision for the future, pledging to “design and propose new value through services to support both corporate and individual customers” through our core business as a total energy supplier and to “become a unified business group that grows and develops hand-in-hand with the community.”

### 2. Financial target (consolidated)

	2017(Results)	2018(Forecast)	2020(Target)	2025(Target)
Ordinary income	<u>8.3 billion yen</u>	<u>5.2 billion yen</u>	<u>9 billion yen</u> or more	<u>12 billion yen</u> or more
ROE	<u>4.1%</u>	<u>2.5%</u>	<u>4%</u> or greater	<u>5%</u> or greater
Capital adequacy ratio	<u>37.7%</u>	<u>37.3%</u>	Maintaining the <u>30%</u> mark	Maintaining the <u>30%</u> mark

### 3. Focused activities for “what we aim to be”

#### (1) Active development of total energy services (electricity and gas sales expansion)

- Launching new electricity rate choices and options that attract customers
- Strengthening electrification promotion activities that reflect customer needs
- Continuing promoting sales of natural gas, which is excellent in the environmental and safety perspectives
- Promoting ESP projects and actively participating in large-scale urban development projects

#### (2) Fundamental reform of the cost structure

- Examining and conducting a zero-based review on operations of individual business fields
- Considering the medium- and long-term power source composition, which can contribute to reduction in the power generation cost





# Energy Service Provider (ESP) Business

- We have established a new company called The Reliance Energy Okinawa, Inc., which is an energy service provider (ESP).
- We own energy facilities on behalf of customers, process energy, supply it.

## [Status of Okinawa Prefecture]

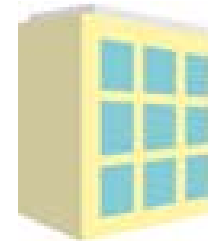
- Large-scale development of urban areas (e.g. former U.S. military bases)
- Construction of hotels in response to an increase in the number of tourists
- Construction of large-scale retail stores

Okinawa Prefecture



## [Issues facing customers]

- Initial investment in energy use (e.g. electricity and gas)
- Burdens involved in facility operation/maintenance and emergency response



Customer

## Chosen by

- SAN-A Urasoe West Coast Development Co., Ltd.
- Yuuikai Tomishiro Central Hospital
- Lab 4 of the Okinawa Institute of Science and Technology Graduate University
- SAN-A ISHIKAWA CITY



株式会社

リライアンスエナジー沖縄

- It owns energy facilities on behalf of customers.
- It provides electricity and gas in the forms of, for example, air-conditioning water, (cold / hot) hot-water supply and steam.



The Okinawa Electric Power Company, Inc.



# Characteristics of the Business Bases

Demand for Electric power	<ul style="list-style-type: none"> <li>◆ Increasing demand due to population growth and increasing tourists.</li> <li>◆ As the proportion of energy for consumer use is high, effects of economic fluctuations are low.</li> <li>◆ Potential demand due to large-scale urban development projects.</li> </ul>
Competition	<ul style="list-style-type: none"> <li>◆ OEPC is outside the framework of wide-area power interchange because it has an isolated system.</li> <li>◆ OEPC has voluntarily released power of 10,000kW supplied by J-Power.</li> <li>◆ Power producer and supplier is currently implementing plans to construct power plants.</li> </ul>
Electric Power Generation Facilities	<ul style="list-style-type: none"> <li>◆ A high reserve supply capacity is required due to an isolated system.</li> <li>◆ Reliant on fossil fuels only due to difficulties to develop nuclear or hydraulic power generation.</li> <li>◆ A sufficient supply capacity is secured after Yoshinoura Thermal Power Plant has started operations.</li> </ul>
Fuel	<ul style="list-style-type: none"> <li>◆ Having introduced LNG, OEPC now provides total energy services.</li> </ul>
Remote Islands	<ul style="list-style-type: none"> <li>◆ OEPC supplies power to 11 isolated systems including those in the main island.</li> <li>◆ The region has a high cost structure because it has small islands and also because the scale of the economy is small. This leads to constant loss recording.</li> </ul>
Renewable Energy	<ul style="list-style-type: none"> <li>◆ Reducing fuel consumption and cost is highly effective on remote islands, where fuel unit price is high.</li> <li>◆ Since the system in the main island of Okinawa is small and independent, the limit of connection volume is likely to occur when using renewable energy.</li> </ul>



This document includes statements concerning future results. Such statements are based on calculations and predictions and are neither definite nor guaranteed. Please be aware that future results may change in accordance with changes in assumptions related to the management environment and the like.

**【Enquiries regarding this document】**

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