2 Value Creation Story

3 Strategy and Performance

power operators.

59

[Implementing Continuous Improvements in Energy Services]

Stable Supply of Energy

In our electricity businesses, we have made it our fundamental mission to continuously deliver environmentally friendly energy at a low cost and in a reliable manner with safety as our top priority. which we see as our greatest social responsibility. To that end, we will continue to maintain the high level of supply dependability we have achieved to date by accurately responding to trends in electric power demand, efficiently forming our facilities, taking steps to reduce power outages, upgrading the operation and management of our facilities, and working to restore power as soon as possible after outages caused by major disasters.

Initiatives to Improve the Safety and Reliability of Nuclear Power

Kyushu EP has been ahead of its competitors in complying with the government's new regulatory standards following the accident at the Fukushima Daiichi Nuclear Power Plant, and has restarted its nuclear reactors. Moving forward, we will continue our efforts to continuously improve the safety and reliability of our nuclear power operations, not only within the regulatory framework, but also by doing due diligence in collecting the latest technical insights and data and applying it to operations.

Installation of Specific Safety Facilities

Under the new regulatory standards set by the government, it is mandatory to install Specific Safety Facilities (SSFs)* that are capable of handling terrorist and other threats.

Sendai Nuclear Power Plant was the first in Japan to pass government inspection under the new regulatory standards, and it began operation in 2020. In addition, installation works were also completed for Genkai Nuclear Power Plant, which is currently in operation (Unit 3: December 2022, Unit 4: February 2023).



* A facility with functions to prevent damage to the reactor containment vessel in the event that the reactor's core is severely damaged due to the loss of the reactor's cooling ability caused by the deliberate collision of a large aircraft with the reactor's auxiliary building or any other act of terrorism

Application for extension of the operation period of Sendai Nuclear Power Plant Units 1 & 2

In order to operate a nuclear power plant beyond the 40-year limit, an application for extension must be submitted to the Nuclear Regulation Authority and permission must be granted.

We submitted an application for extension for Sendai Nuclear Power Plant Units 1 & 2 in October 2022, and will take measures as appropriate toward getting permission.

Period of extension

	Start date of extension	End date of extension	Extension period
Unit 1	July 4, 2024	July 3, 2044	20 years
Unit 2	November 28, 2025	November 27, 2045	20 years

Efforts to prevent nuclear accidents

We are working to improve our response capabilities by developing emergency systems and conducting repeated drills in preparation of a nuclear accident so that we will be able to promptly respond to any type of situation at our nuclear power plants.



In addition, we are stepping up our cooperation with related organizations In-house nuclear emergency drill simulating and businesses by participating in nuclear power disaster drills offered by the a major accident at Genkai Nuclear Power national and local governments, as well as joint drills carried out by nuclear Plant (February 2023)

Environmental radiation control around nuclear power plants

We continuously monitor and measure radiation levels in the vicinity of nuclear power plants, and disclose that data in real time on the website of Kyushu EP. In addition, we regularly measure the radioactivity contained in environmental samples such as soil, seawater, crops, and marine products, and to date, there has been no identification of any environmental impact due to the operation of our nuclear power plants.

The radiation dose received by people in the vicinity of the nuclear power plant is less than 0.001 millisieverts per year, which is far below the legal dose limit of 1 millisievert per year and the target value of 0.05 millisieverts per year set by the former Japanese Nuclear Safety Commission.

Radiation levels in daily life (unit: millisieverts)



Enhancing communication with local residents regarding nuclear power

In order to make local residents feel assured about nuclear power generation, we make sure to disseminate easy-to-understand information about our initiatives to improve the safety and reliability of our power plants. We are committed to making use of visits, plant tours and other opportunities to engage in interactive communication activities Company-wide.



Dialogue with local residents

KYUDEN GROUP INTEGRATED REPORT 2023

1 Overview of the Kyuden Group

yuden Group 2 Value Creation Story

Annual duration and frequency of power outages per

Impact of typhoons

earthquakes, etc

1990 2018 2019

Duration of power outages (mins.)

No. of power outages (times)

2020 2021 2022

3.5

3.0

2.5

2.0

1.5

1.0

).15 (time:

(FY)

Z

customer household

1980

1970

561 (mins.)

600 T 3.13 (times

500

400

300

200

3 Strategy and Performance

Implementing Continuous Improvements in Energy Services

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Maintaining and Improving the Reliability of Supply

In order to deliver stable, high quality electricity to our customers that they can use with peace of mind, Kyushu T&D is constantly working to patrol, inspect, and repair facilities, operate them safely and efficiently, and develop and improve construction methods.

Preventing power outages

In order to prevent power outages along our transmission and distribution lines, we are working to identify points of hazard ahead of time by patrolling facilities, in addition to implementing countermeasures and preventing birds and other animals from building nests. We also continuously survey the distance between trees and our power lines and fell them as necessary with the understanding and cooperation of all parties concerned to prevent power outages and equipment damage caused by trees.

Other efforts include reinforcing our facilities to reduce power outages caused by lightning, typhoons, and other natural disasters, and maintaining them meticulously based on their condition.

Planned updates to aging facilities

In preparation for the aging of facilities built to meet an increase in electric power demand following economic growth, we are making progress in inspections and repairs focused on aging facilities and planned updates to facilities in order to stably maintain facility functions over the long term. We are also working to improve the accuracy of equipment life estimates through analysis of equipment deterioration data, etc., which is reflected in plans for the renewal of older equipment.

Promotion of Safe and Disaster-resistant Urban Development

Prevention of public electric shock incidents

Kyushu T&D has been regularly carrying out PR activities and requests for cooperation to civil engineering, construction, and crane companies, elementary and junior high schools and boards of education, local governments, police and fire stations, and other organizations in order to prevent incidences of electric shock among the general public.

In addition, we are strengthening our safety measures by implementing equipment-related measures to prevent public electric shock incidents that are caused by contact with power equipment.

Number of public electric shock incidents (number of deaths and					
hospitalizations)					
					<u></u>

FY	2018	2019	2020	2021	2022
No. of incidents	1	1	0	0	0

Disaster emergency information transmission system that utilizes utility poles

In order to address the issue of the current emergency broadcast system not fully reaching all areas, Kyushu T&D is working on a disaster emergency information transmission system that uses speakers attached to utility poles to deliver disaster preparedness information with clarity to residents.

Pilot testing of the system conducted from January 2020 in Toho Village, Asakuragun, Fukuoka Prefecture obtained positive results. As such, we began full-scale introduction of the system in this same village in March 2022. We are now actively visiting many municipalities in Kyushu to propose introduction of the system.



System installed on a utility pole

Improvement of Disaster Response Capabilities

Strengthening the disaster response system

We have been strengthening cooperation with relevant authorities to rapidly restore power during disasters. We have entered into cooperative agreements with not only the Ground and Maritime Self-Defense Forces, but also the 7th and 10th Regional Coast Guard Headquarters and all local governments in the Kyushu area (7 prefectures, 233 municipalities) in the event of a disaster.

Based on these cooperative agreements, we strive to maintain a joint cooperation system, carrying out drills and other activities in preparation for large-scale disasters with related organizations.

In addition, we are also working to strengthen cooperation with other companies, including entering into agreements for joint cooperation with West Nippon Expressway Company Limited, Lawson, Inc., and AEON Co., Ltd. with the goals of facilitating the passage of emergency and other vehicles, diversifying the means of procuring relief supplies, and securing sites that can serve as a base for recovery efforts.



Agreement finalization ceremony with the 7th Regional Coast Guard



Personnel and equipment loading training with the Japan Coast Guard Headquarters

Responding to large-scale disasters

Kyushu EP and Kyushu T&D have developed a joint disaster response system and will work together with partner companies and government agencies to quickly disseminate information and resolve power outages as soon as possible in the event of a typhoon, torrential rain, or other large-scale disaster.

In September 2022, Typhoon Nanmadol caused power outages in up to 350,000 households, mainly in southern Kyushu. We mobilized up to 5,900 employees, including those from northern Kyushu, which suffered relatively little damage, to dispatch support to the south, and worked closely with local governments to restore power as soon as possible.

3 Strategy and Performance

Implementing Continuous Improvements in Energy Services

Affordable Energy

Kyushu EP is working to improve management efficiency by reducing fuel costs through diversifying fuel procurement methods and reducing equipment procurement costs, thereby aiming to lower power generation costs.

Efforts to reduce fuel costs

Initiative	Overview		
Expand procurement through competitive quotations	· Procure with more competitive quotes to reduce fuel prices, transportation costs, import agent fees, etc.		
Diversify supply sources	Expand the use of sub-bituminous coal and standard-grade coal, which are less expensive than high-grade coal, and introduce high-ash coal, which is expected to be more economical Diversify our supply sources by introducing South American and Central Asian coals that had previously been shipped to Europe		
Cooperate with other companies	\cdot Respond to fluctuating requirements flexibly in cooperation with other operators to optimize supply and demand operations		
Diversify pricing methods	Reduce the risk of price fluctuations and fuel procurement costs by diversifying and optimizing our pri- methods, including fixed-price and market-price-linked methods Adopt LNG pricing methods that use new indicators to curb procurement price fluctuations and improv- economic efficiency		
Pursue economic efficiency based on market trends	\cdot Reduce procurement costs through an appropriate combination of and negotiations on long-term, short-term, and spot contracts based on market conditions		
Strengthen participation in the fuel value chain	Acquire upstream equity interest (contributes to stable fuel procurement, flexibility, and enhanced procurement capabilities by acquiring information from producers) Reduce transportation costs by thoroughly managing and maximizing the use of our own vessels Balance supply and demand internally with contracts for the use of LNG terminals overseas that can receive and dispense LNG		

Efforts to reduce equipment procurement costs

Measures	Overview		
Make use of the competition principle	 Expand and enhance competitive effect by improving motivation toward placing orders, including introducing new suppliers, separating orders, and ranked allocation, etc. 		
Assess overall advantages	Pursue overall economic efficiency through a multifaceted assessment of factors other than initial costs, such as running costs and other maintenance costs, efficiency, durability, and reliability, etc.		
Contrive ordering methods	Pursue economies of scale by joint procurement with other companies and combining and ordering multiple projects Apply optimal ordering methods to balance stable procurement with reduced costs, etc.		
Work with suppliers and make use of their knowledge	 Proactively make use of supplier knowledge, including value engineering (VE) and technological proposals, etc. Unit cost reduction activities such as cooperating with suppliers to revise specifications and improving work efficiency on-site, etc. 		
Revise specifications and techniques	· Ease required specifications, improve efficiency by contriving better techniques, etc.		

· In FY2022, we achieved a cost reduction of ¥20.8 billion through efforts to reduce equipment procurement costs.

Solutions Based Around Energy Services

The Kyuden Group works as one to provide products and services that precisely address the diverse needs and concerns of our customers, lead to more prosperous, comfortable lives for them, and generate economic activity.

We will keep working to enhance our services based on customer feedback so that customers continue to trust and choose us.

The Kyuden Group's Diverse Products and Services Helping Solve Local and Social Issues

Starting from February 2019, the Kyuden Group has been marketing the Group's various products and services to local governments and corporations under the name "with Q."

In 2021, we packaged together Group products and services related to electrification, renewable energy, and energy conservation to offer customers based around the theme of decarbonization, which is of growing societal concern.

Along with offering products in the four categories of disaster prevention measures, countermeasures against extreme heat, information security, and switching to LEDs, which are of high interest to local communities and society, we also provide a lineup of related products that take a separate approach for each customer, including medical institutions, offices, and manufacturing sites, proposing optimal solutions for each individual customer's issues.



Providing Rate Plans that Meet Customer Needs for Decarbonized Electricity

(For households)

Kyushu EP offers the "Marugoto Saiene (100% renewable energy) Plan" for a fixed monthly fee of ¥500 to meet the needs of households wanting to use electricity derived from renewable sources, and the "Let's Grow Future Forest Plan" through which a fixed monthly donation of ¥300 goes to environmental conservation activities undertaken by the Kyuden Mirai Foundation.

100%	Re	enewable E	nergy Plan	
Electricity rate plan (main contract)		Electricity rate plan (optional contract)	vour home's electricity is 100% renewable energy	/
Household Plan	+	100% Renewable Energy Plan		

(For corporate customers)

Based on the growing and diversifying renewable energy needs of customers, as well as changes in the environment such as revisions to the non-fossil value market, Kyushu EP offers three renewable energy and CO₂-free plans for corporate customers to meet customer needs with great care.

