1 Safe, Stable Delivery of Products and Services

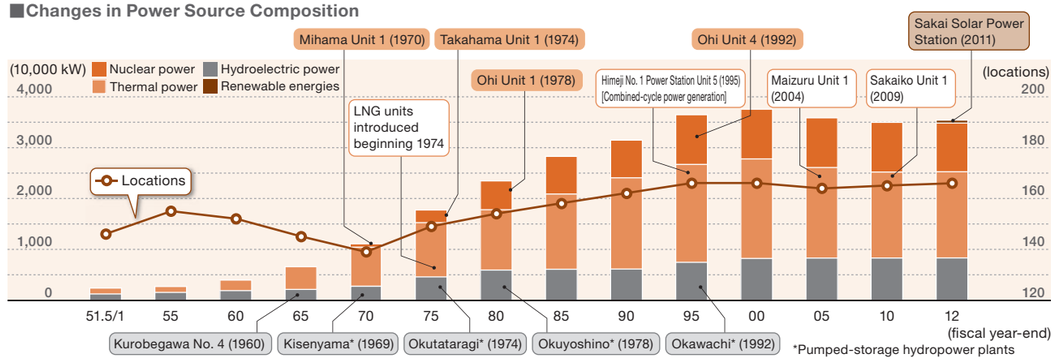
Our mission and responsibility as a lifeline service provider

To fulfill the most important mission of the Kansai Electric Power Group—providing safety and stability—the entire Group is working to place safety first, and to make the provision of electric power as stable as possible.

Facilities configuration based on S+3E

To carry out our mission of providing customers with high-quality, economical electricity on a stable basis, Kansai Electric Power has adopted its S+3E approach, under which we assign the utmost priority to Safety, while striving to secure long-term Energy security as well as maintain a focus on Economy and Environmental conservation. We use this approach to consider all aspects of our facilities configuration to achieve a favorably balanced combination of nuclear, thermal, hydroelectric, and renewable energy generation.

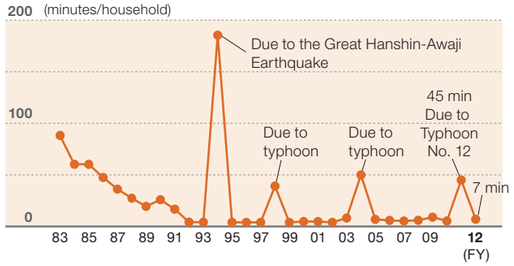
■Changes in Power Source Composition



To provide high-quality electric power

To ensure safe, stable supplies of electric power, Kansai Electric Power works to operate power grids that provide a reliable link between power plants and consumers and enable an optimal configuration of facilities. We are also engaged in rigorous efforts to prevent accident recurrence, as a result of which Kansai Electric Power achieved one of the world's highest power supply quality levels in FY 2012. The Company is continuing to develop and install new technologies and construction methods to ensure that accidents are prevented, and to enable swift recovery in the event an accident does occur. Equally important, systematic renovation is in progress for aging facilities that were constructed during Japan's post-war period of rapid economic growth. In response to public demand, we are striving to create a flawless supply system, thereby contributing to the continuing development of the Kansai region.

■Annual Duration of Power Outage Per Household



Configuring work schedules to meet tight supply and demand conditions

Although the Ohi Nuclear Power Station resumed operation in fiscal 2012, we continue to face tight supply and demand conditions. In response, we reviewed our maintenance and inspection work on thermal and other power plants including acceleration of work or postponing where practical, and took other steps on a unified Group basis to ensure stable power supplies. Nevertheless, such efforts as repair work on transmission lines and transformers did not progress as originally outlined, and in some cases we were forced to revise our plans. In such cases, the load-dispatching center shared information closely with related locations, striving to prevent a loss in supplied power quality without sacrificing the economical balance between supply and demand. Moreover, we worked to adjust repair schedules to ensure safe working conditions. Going forward, we will continue to maintain close collaboration with substations, load-dispatching centers, and other facilities to provide safe, stable power while enhancing the efficiency of our repair work.

Demand-related efforts to encourage stable power supply

Kansai Electric Power strives to secure adequate power generating capacity and, at the same time, for the prevention of large-scale power interruptions, we work to project demand conditions in advance and coordinate closely with national and local governments to secure the understanding of customers and society with respect to demand conditions, and call on them for cooperation in conserving electricity.
We are also promoting a variety of activities targeting corporate customers to suppress peak demand effectively and efficiently. We have established new contract schemes to enable supply and demand adjustment, and work with BEMS aggregators whose business is to adjust loads and reduce peak demand. In addition, we encourage our residential customers to take up use of our net-based "Hapi e-Miruden" service (see pages 32 and 38), which makes power use visible, and offer energy-saving consultations in response to heightened awareness regarding the exigency of conserving energy and the wide variety of customer needs.
With the continued cooperation of our customers and society, we are working toward stable supply of electricity.

Tireless efforts to create a safety culture

We believe that safety is the core of all our business activities and the basis upon which the public places their trust in us. It is essential to improving the quality of all our business activities and to our future growth. Kansai Electric Power will therefore continue working tirelessly to ensure that safety assurance is given the highest priority in our business activities so that we can continue achieving results in this area. Through daily interactive communication with all associated companies that sustain the operation of the Kansai Electric Power Group, including its partner companies, we promote the sharing of safety awareness and mutual education in relation to safety, as well as risk reduction activities. We are thus working to create an unshakable culture of safety—the Kansai Electric Power Safety Culture Zone—at even higher levels throughout the group.


We have established a safety incentive system with awards given by our president to honor outstanding safety innovations by partner companies

Training the personnel who support safe and stable supply functions

To enable us to provide products and services in a safe, reliable manner, Kansai Electric Power recruits new staff yearly and implements systematic education with the aim of nurturing specialist personnel. We are also promoting a range of initiatives to ensure that technologies and skills are maintained and passed on. These include our Specialist Technician System* and a system for ascertaining the technological capabilities of individual employees. In doing so we hope to ensure that the technologies and skills our personnel have built up thus far will be passed on Group-wide and further improved upon.

*Specialist Technician System: This is a system for certifying frontline employees who possess special, advanced technical capacity and skills particular to the electric power industry, and the passion and guidance capabilities to pass on their skills to younger colleagues as Specialist Technicians. Specialist Technicians take responsibility for guiding and educating their juniors on the frontline in terms of technology and skills, ensuring expertise particular to the electric power industry will continue to be passed down. As of May 31, 2013, there are 226 certified Specialist Technicians.


Training activity

Preparing for a major disaster

Based on our mission of the stable provision of electric power, Kansai Electric Power is engaged in initiatives to strengthen facilities to withstand disaster and establish a disaster control system to enable rapid recovery as basic measures for dealing with natural disasters such as earthquakes, typhoons, heavy snow, heavy rain, and lightning.
Drawing on the lessons of the Great East Japan Earthquake, as well as a study issued by the Japanese government in March 2013 concerning potential damage from a major Nankai Trough earthquake, we are promoting measures to deal with larger than predicted earthquakes and tsunamis.

■Strengthening facilities for disaster resistance

Thanks to lessons from past natural disasters, electric power facilities are today designed to sustain minimal damage even in the event of earthquakes, tsunamis, typhoons, or other natural disasters. Also, the power distribution system covers the Kansai region like a fine mesh net. In the unlikely event of damage occurring to part of this network, power can be supplied quickly from alternative connecting routes.

■Efforts to enable rapid recovery

In the event that power facilities are likely to be damaged as the result of a disaster, or upon actually detecting such damage, a disaster response structure, as described below, will immediately be established to deal with the situation. Through this structure, the Company gathers and distributes information both from within the Group and from other sources, determines recovery policy, and proceeds with recovery activities.
We have also enhanced our structures for rapid response, through measures such as the securement of equipment and means of transportation and communication, as well as preparation of other necessary supplies.

■Verifying response plans through training and further enhancement of disaster readiness

The Japanese government has released a study of the possible effects of a major Nankai Trough earthquake in a major subduction zone on the ocean floor southeast of the Kansai region. In light of this study, we consider a major Nankai Trough earthquake to be the greatest natural disaster risk we face, and we are carrying out simulated, role play-type emergency training aimed at honing our capacity to respond to widespread quake damage at our offices and power generation facilities.
Through this training, we are enhancing our response skills as well as verifying the disaster mitigation procedures we have implemented so far. At the same time, the training is highlighting the best approaches for information sharing, ensuring employee safety, and other challenges of the mitigation effort. We are considering how best to respond to these challenges as we strengthen our ability to cope with major disasters.

■Collaboration with entities involved in disaster recovery

As part of our efforts toward speedy disaster recovery, we work closely with local governments by, for example, participating in disaster response meetings, where we can provide information relating to the recovery status of Company facilities. This allows local governments to facilitate our efforts for the earliest possible restoration of power supply by prioritizing repair of roads that are essential to our recovery work.
Furthermore, we are contributing to regional disaster recovery by loaning portable generators to local governments in case road blockage threatens to prolong the interruption of power in the wake of a disaster. We are also ready to provide support in delivering vital life supplies.
In addition, we are actively participating in activities including reviews of regional government disaster response plans, and promoting disaster response measures in coordination with local communities. We consider it important that, when responding to a major Nankai Trough earthquake or other wide-area disaster, the accumulation of disaster response measures is better achieved by government, infrastructure providers, regional communities, and individuals working in close collaboration, rather than by a single entity working alone.

Initiatives prioritizing safety at nuclear power plants

Principal energy sources

Each energy resource used to generate electric power has its own unique characteristics.

■Principal Energy Sources

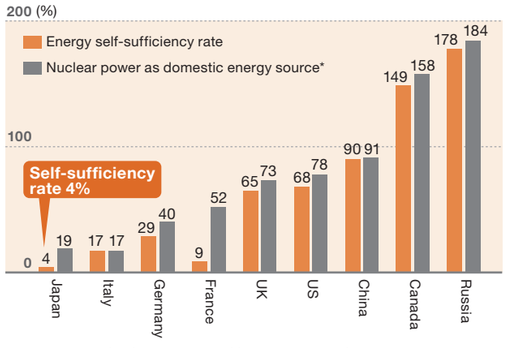
Nuclear power (uranium)	Widely distributed, centered on countries with stable politics; fuel can be recycled; strict radiation control required
Thermal power (oil)	Uneven distribution in politically unstable Middle East; severe price fluctuations; emits CO_2, a cause of global warming
Thermal power (coal)	Ample reserves compared to oil and widely distributed throughout the world; stable price; special attention required for environmental preservation, including SOx and NOx control measures
Thermal power (LNG)	Stable fuel procurement; price tracks that of oil closely; cleaner than oil and coal
Hydroelectric power	Renewable, clean domestic energy source; few remaining potential construction locations and large-scale development difficult
Solar power	Renewable, clean domestic energy source; unlimited resource; affected by weather; large development area required
Wind power	Renewable, clean domestic energy source; unlimited resource; affected by weather

Reference: "Electricity Review Japan 2013," Federation of Electric Power Companies of Japan, other sources

Ensuring stable energy supplies

When nuclear power is excluded, Japan's energy self-sufficiency rate is only around 4%. For the remainder of its needs, Japan must rely on imported energy. However, political conditions in the Middle East, from which Japan imports over 80% of its crude oil needs, and which also accounts for a third of the world's liquid natural gas (LNG) exports, are unstable. As such, overdependence on these sources of energy entails not only price risk, but also stable supply risk. In contrast, the uranium used in nuclear power plants is widely distributed throughout the world, and many of the nations where it is produced are politically stable, giving uranium excellent supply stability. It is therefore necessary to maintain diversified resource procurement and an optimal mix of electric power generation methods to ensure stable future energy supplies.

■Energy Self-Sufficiency Rate for Major Countries (2010)



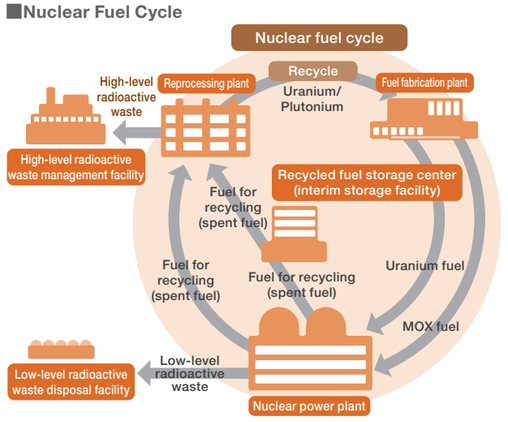
*Uranium can be treated as equivalent to a purely domestic energy source since this energy source for nuclear power generation can be used for an extended period after importation, and is also able to be reprocessed and recycled.

Reference: Energy Balances of OECD Countries 2012, Energy Balances of Non-OECD Countries 2012 (International Energy Agency)

Securing resources through the nuclear fuel cycle

Fuel used in nuclear power plants is not completely consumed during the power generating process. Uranium and plutonium remain in the fuel rods, and these elements can be used further as fuel. The process of extracting these elements, processing them into nuclear reactor fuel, and using them for further power generation is known as the nuclear fuel cycle. In particular, MOX fuel, which is made with plutonium extracted during the fuel cycle, can be used in conventional light water reactors.
In January 2011, Kansai Electric Power began using MOX fuel at Takahama Nuclear Power Station Unit 3.
To achieve a more flexible nuclear fuel cycle operation, we are promoting the establishment of an interim storage facility where spent fuel can be held for a certain period of time before reprocessing.

■Nuclear Fuel Cycle

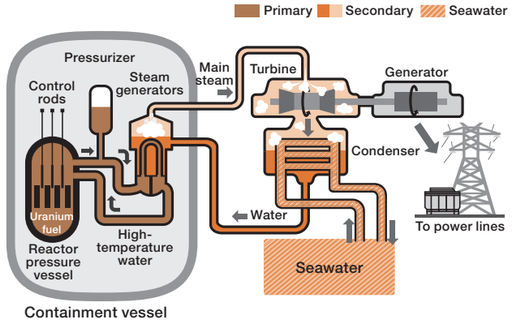


Reference: "Graphical Flip-chart of Nuclear and Energy Related Topics 2013," Federation of Electric Power Companies of Japan, other sources

Nuclear power generation

Nuclear power generation uses the heat energy of uranium fission to create steam. The steam drives turbines that generate electricity.

■Nuclear Power Generation



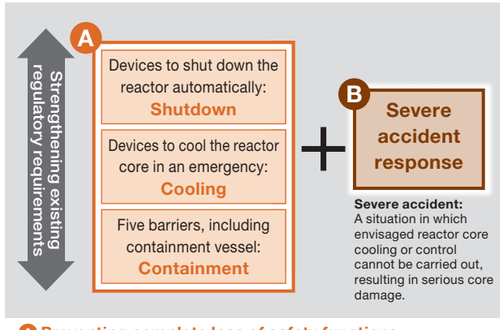
Enhancing nuclear power safety and reliability

Kansai Electric Power is carrying out a variety of measures to minimize risk and ensure sufficient safety at its nuclear power plants.

■Ensuring nuclear power plant safety

Nuclear power plant facilities utilize the concept of 'defense-in-depth' to prevent nuclear accidents. First, the facilities are constructed to standards even stricter than those laid down by law, and their designs include multiple safety systems, to prevent a malfunction or human error from resulting in an accident, premised on the fact that machines break down and human beings make mistakes.
Safety measures are in place at multiple levels for the unlikely event of a malfunction occurring, and multiple safety functions come into action as necessary: detection of abnormalities at an early stage; automatic shutdown of the nuclear reactor; cooling the fuel by injecting large amounts of water; and containing radioactive materials within five barriers. In addition, in order to comply with the new regulatory requirements issued by the Japanese government in July 2013 in the wake of the accident at TEPCO's Fukushima Daiichi Nuclear Power Station in March 2011, Kansai Electric Power is strengthening existing safety measures, and taking additional measures to cope with a 'severe accident.'
Going forward, we will aim to achieve the highest global level of safety, beyond the standards set by the new law, by autonomously and continuously striving to enhance nuclear power plant safety and reliability.

■New Regulatory Requirements for Nuclear Power Plants

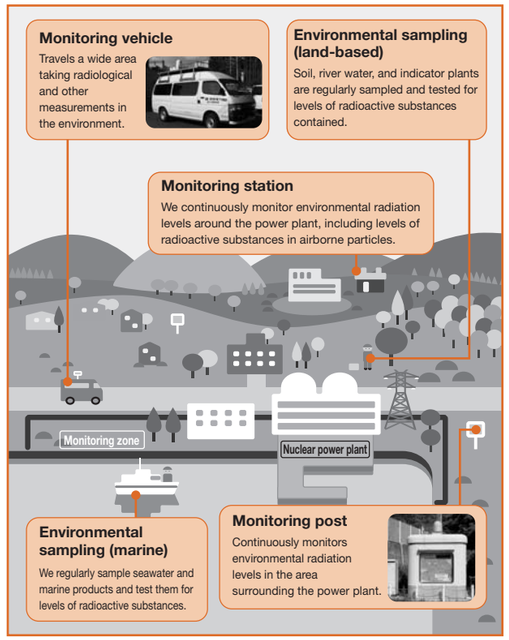


A Preventing complete loss of safety functions
Strengthened response to natural disasters, fires, etc.
B Upgrading of facilities and measures to be able to respond to even a severe accident
Adding redundancy to core cooling and power supply measures for emergencies
B Measures to cope with terrorism and intentional aircraft crashes
Measures including establishment of a response center for severe accidents and other emergencies*

*Response center for severe accidents and other emergencies: A facility for controlling large-scale release of radioactive substances in case of significant core damage.

■Radiation control

Radiation and radioactive substances are stringently controlled at nuclear power plants. To monitor the effects of radioactive substances on the surrounding environment, multiple monitoring stations and monitoring posts are located around each plant. Atmospheric radiation levels are monitored around the clock, and this data can be accessed on our website and elsewhere.
In addition, Kansai Electric Power regularly samples soil, river water and seawater, indicator plants (e.g. pine leaves), and marine products in the vicinity of its nuclear power plants and tests for the levels of radioactive substances contained to monitor impact on the environment.
The results of this environmental radiation monitoring, and of monitoring by other organizations, are regularly compiled and released to the public after vetting by specialists.

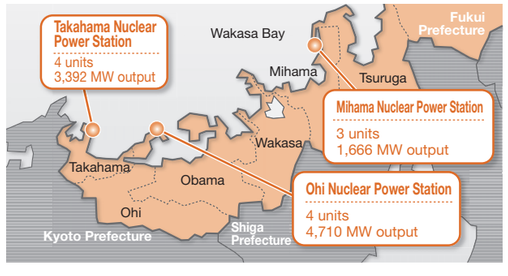


Web Environmental Monitoring
http://www1.kepco.co.jp/gensi/monitor/live_kankyo/index.html

■Stringent implementation of measures for aging management

To ensure the safety of its aging facilities, Kansai Electric Power conducts technical research for aging nuclear power plants concerning age-related changes at nuclear power plants that have been in operation for more than 30 years, and has established a Long-Term Maintenance and Management Policy to be reflected in maintenance activities.
It goes without saying that Kansai Electric Power ensures that its nuclear power plants that are approaching a 40-year service life are in compliance with all aspects of the new regulatory requirements. In addition, we will continue to consider further measures based on the results of debate concerning revisions to related laws in the wake of the new Reactor Regulation Act, as well as debates concerning the government's energy policy.

■Kansai Electric Power's Nuclear Power Plants



Measures to prevent a recurrence of the accident at Mihama Nuclear Power Station Unit 3

On August 9, 2004, an accident occurred at Kansai Electric Power's Mihama Nuclear Power Station Unit 3, in which secondary system piping in the unit's turbine building ruptured.
With a firm determination to avoid repeating such an accident, we have been working hard at implementing the recurrence-prevention measures that we promised to the public, based on the President's Declaration, "Ensuring safety is my mission, and the mission of the Company."
To ensure that the lessons learned from the accident continue to be transmitted into the future, August 9 every year is proclaimed "Safety Vow Day." On this day, each employee observes a moment of silence, and refers to the Conduct Card in which he or she has personally entered a safe action declaration. Moreover, a pamphlet with a summary of the accident and its lessons, along with measures to prevent recurrence, has been published over Kansai Electric Power's intranet and distributed to employees in the Nuclear Power Division. Lectures based on this pamphlet are carried out and discussions are conducted at each worksite. Through these efforts, we are working to ensure that the lessons of the accident are not forgotten.

President Yagi observes a moment of silence in front of the monument of the Safety Vow (August 2013)

President's Declaration

Ensuring safety is my mission, and the mission of the Company.

Basic Action Policy

1. We will make safety our top priority.
2. We will proactively introduce resources to ensure safety.
3. We will continuously improve maintenance management to ensure safety and establish closer cooperation with partner companies.
4. We will strive to regain the trust of local communities.
5. We will objectively assess our efforts toward safety and publicize the results.

Excerpt from Action Plan to Prevent Recurrence of the Accident at Mihama Nuclear Power Station Unit 3

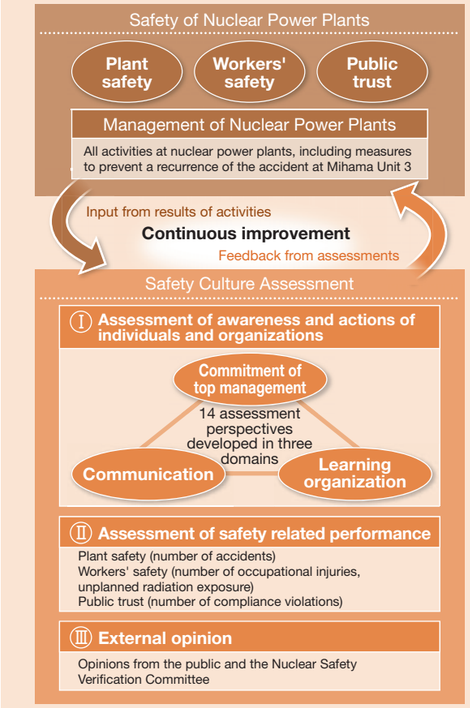
Web **Mihama Nuclear Power Station Unit 3 Accident (in Japanese)**
http://www1.kepco.co.jp/notice/mihama/jiko.html

Establishing a firm culture of safety

We have mounted a full-scale effort to ensure that we undertake our business operations without forgetting the lessons of the Mihama Unit 3 accident, with safety as our highest priority. Since 2008, we have introduced a safety culture assessment system, through which the conditions of our nuclear power safety culture can be assessed from a variety of viewpoints, and priority measures can be extracted from those assessments.
Safety culture assessments are carried out by each department within the Nuclear Power Division and by each power plant. The results of these assessments are compiled to arrive at an overall assessment. The 2012 assessment identified focal tasks such as "expansion and strengthening of employee training to maintain technical capabilities" and "enhancing nuclear power plant safety above and beyond the regulatory framework," and we are striving to accomplish these tasks.

We are also studying closely the reports and other materials relating to the accident at TEPCO's Fukushima Daiichi Nuclear Power Station. Adopting lessons extracted from the reports into the viewpoints of the assessment, we are thus enhancing the structure of our safety culture assessment system.
We will undertake to carry out continuous improvements to foster an even stronger culture of safety.

■Summary of Activities to Foster a Culture of Safety



Company-wide promotion of nuclear power safety

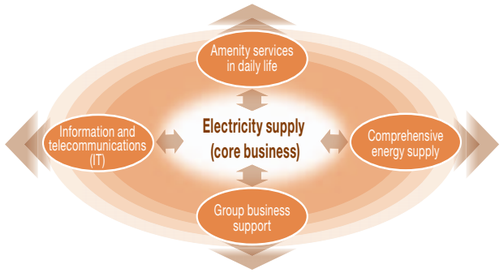
Kansai Electric Power established its Nuclear Safety Enhancement Committee, which includes executives from a cross section of the company and is leading company-wide efforts to prevent recurrence of the accident at Mihama Nuclear Power Station Unit 3 and foster a culture of safety. After the accident at TEPCO's Fukushima Daiichi Nuclear Power Station, the committee is carrying out wide-ranging discussions to ensure voluntary additional initiatives undertaken autonomously and continuously to enhance nuclear power safety. As of the end of July 2013, the committee has convened 170 times.
In FY 2012, the committee engaged in a variety of activities, including wide-ranging discussions from diverse perspectives concerning what lessons should be extracted from the various studies of the Fukushima Daiichi accident. Committee members also participated in face-to-face meetings between senior management of the Nuclear Power Division and young employees at our nuclear power plants, to encourage communication with frontline personnel.

Providing services as a unified group

Aiming to be a trusted partner in energy and life

As a comprehensive provider of electricity and other forms of energy, as well as a variety of information and telecommunications (IT) services and a lineup of businesses providing amenity services in daily life, Kansai Electric Power Group interacts with the people of the Kansai region in many different ways. These interactions enable us to grow closer to our customers and integrate our electricity and other Group services as a total solution. By meeting and exceeding our customer needs, our aim is to become our customers' trusted partner in energy and life.

■Combining Electricity and Group Services for a Total Solution



Services for residential customers

For residential customers, Kansai Electric Power Group offers products and services addressing a wide range of daily needs in areas including housing supply that can contribute to energy conservation, cost reduction, and CO_2 emissions reduction, as well as IT, home security, nursing care, and health management support. By offering these products and services separately or in combination, we can provide customers with meticulous support and help them achieve safety, security, comfort, and convenience in their daily lives.

■eo SMART LINK—a tablet-based service to enhance daily life

K-Opticom Corporation offers eo SMART LINK as a supplementary service for customers using our Fiber to the Home (FTTH) service. eo SMART LINK enhances customers' daily lives by furnishing them with a tablet device to access more than 100 different services from Kansai Electric Power Group and other providers, from finding housekeeping assistance and ordering from net-based supermarkets to accessing healthcare services and monitoring their electric power consumption at a glance.
The members of Kansai Electric Power Group will continue striving together to offer customers useful services that meet their needs.

Toward improvement of customer service

To enhance our customer service, Kansai Electric Power is expanding the use of smart meters. We also offer Hapi e-Miruden, a service that enables customers to monitor their electric power consumption at a glance.

■Expansion of smart meter use

Going forward, we will actively increase the number of smart meters installed, and utilize them to promote the visual representation of electricity use. We are also using the detailed power consumption data we obtain from smart meters to offer customers pricing plans according to their use of electricity, with the aim of enriching the customer service we provide.

■Hapi e-Miruden enhancement and promotion

In place of the conventional meter reading note, Kansai Electric Power offers Hapi e-Miruden, a web-based tool that enables residential customers to monitor their power consumption and expenditure graphically while focusing on reduction of energy use, costs, and CO_2 emissions. We will continue our efforts to enhance the web platform to make it even more useful for an increasing number of customers.

Web **Hapi e-Miruden**
http://www.kepco.co.jp/service/miruden/index.html

6 Advantages of Hapi e-Miruden

1 Check your power bill anytime, anywhere!
Use your PC or smartphone to check your power bill, or even the purchase rates for excess solar power you are selling. You'll receive a mail with your total charge each month.

2 Graph your past power bills!
Graph your past power bills to spot trends. You can also download your data in PDF and CSV formats.

3 Compare your heating and lighting bills with others!
You can rank your household with comparable households in terms of lighting and heating costs as well as CO_2 emissions.

4 Simulate different strategies for reducing lighting and heating costs!
You can see the potential impact on lighting and heating costs of such moves as changing your contract options.

5 Set your energy conservation target and record the results!
To help reduce your energy consumption, set monthly energy conservation targets and record the results.

6 Kansai Electric Power keeps you up to date!
Access event schedules, warnings about suspicious business entities, and other important information.

Services for corporate customers

Kansai Electric Power promotes a variety of efforts to reduce peak power demand and encourage load leveling. To this end, we offer energy systems best suited to customer needs.
For example, in collaboration with Kanden Energy Solution Co., Inc., one of our Group companies, we offer Utility Service and ESCO Service, which include energy facility design and construction, support for facility ownership, operation, maintenance, and management. We also offer our Energy Management Service to help customers optimize their energy use.