



# **Public relations activities of Kansai Electric Safety Inspection Association concerning safe use of electricity**

November 29, 2013

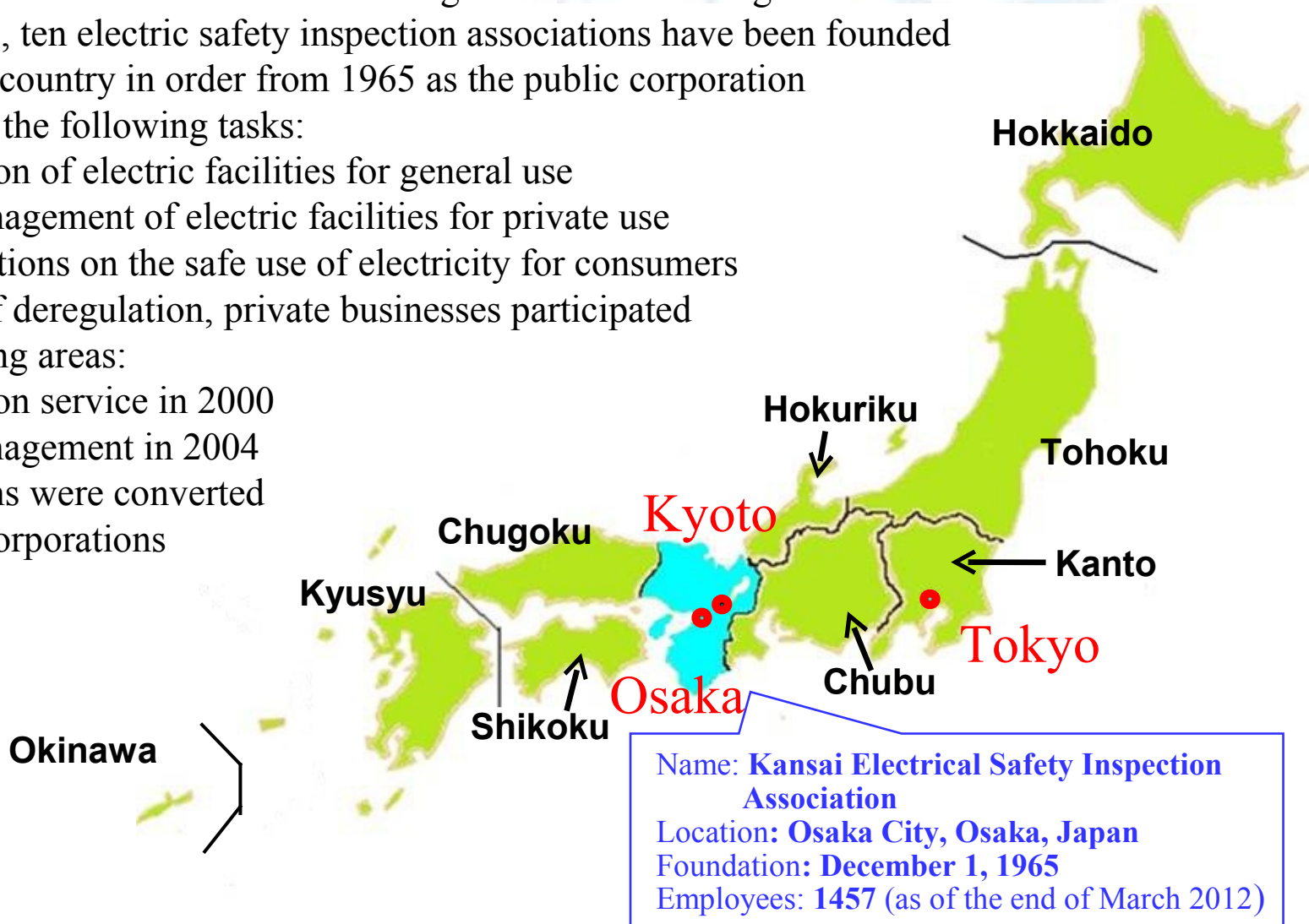
Kansai Electric Safety Inspection Association

Department of Electrical Safety

Department Manager Takashi Sakai

## About the Electric Safety Inspection Association

- As the investigation of electric facilities for general use was obligated for electric utilities, ten electric safety inspection associations have been founded throughout the country in order from 1965 as the public corporation responsible for the following tasks:
  - Investigation of electric facilities for general use
  - Safety management of electric facilities for private use
  - Public relations on the safe use of electricity for consumers
- As a result of deregulation, private businesses participated in the following areas:
  - Investigation service in 2000
  - Safety management in 2004
- The associations were converted into general corporations in 2012.



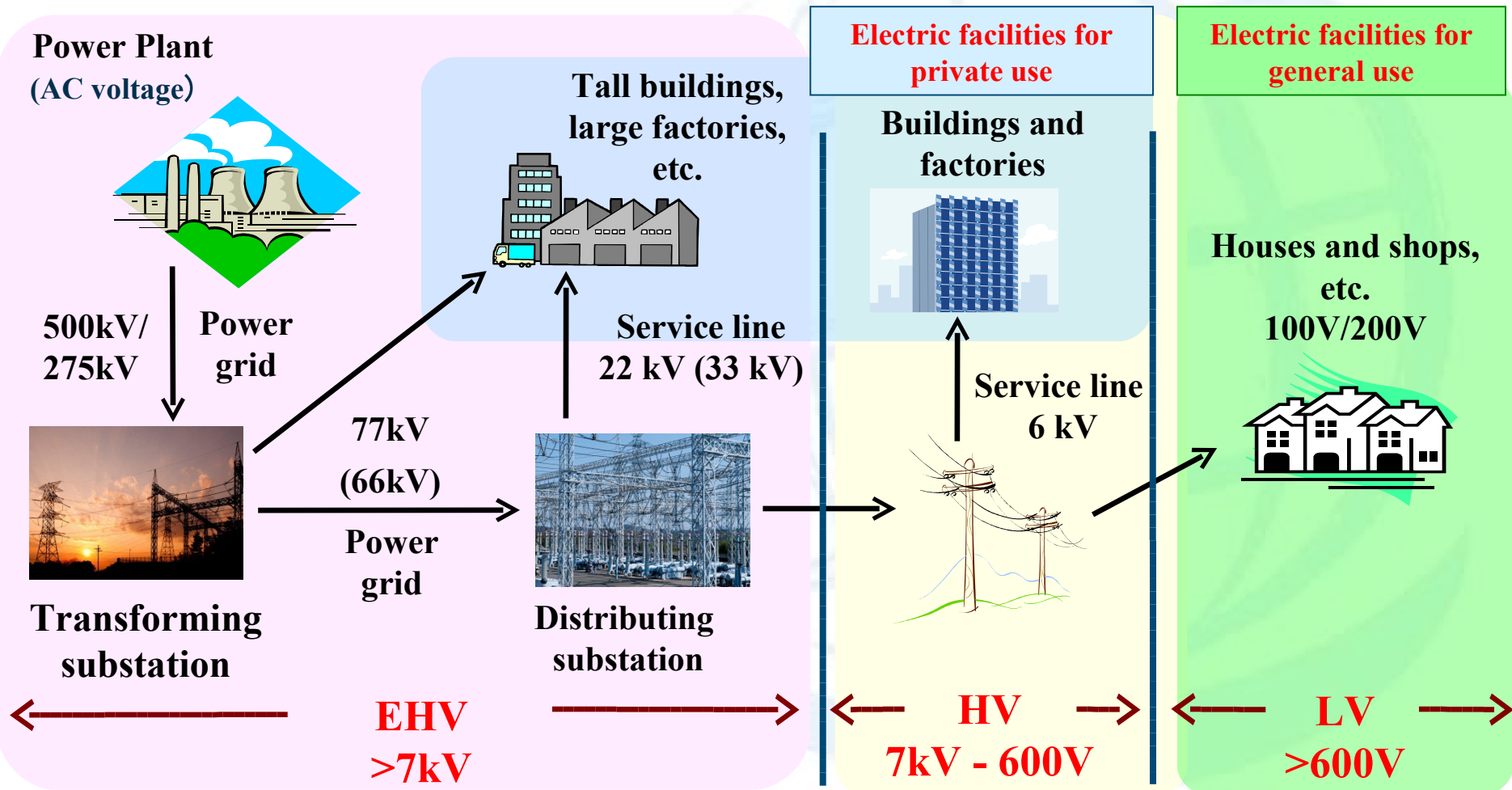
## Presentation

- I. Electric facility safety management system in Japan**
- II. PR of Kansai Electric Safety Inspection Association**
  - Raising awareness of electric safety management-**
- III. Accidents relating to electric facilities for private use and reliability of power supply**
- IV. Summary**



# **I. Electric facility safety management system in Japan**

## Voltage classes and electric facility types in Japan



## Laws relating to the safety of electric facilities

### 1. Electricity Business Act

- (Objective) Ensuring benefits of electric users and public safety.
- (Regulation)
  - Provide obligatory technical standards for electric facilities.
  - Regulate the installation, maintenance and operation of electric facilities for private use.
    - Obligate investigations of electric facilities for general in conformance to technical standards.

### 2. Electrician Act

- (Objective) Preventing hazards caused by defects in electric work (<500 kW).
- (Regulation) Define the qualification and obligation of electric workers.

### 3. Act concerning the Business Optimization of Electric Works

- (Objective) Ensuring the safety of electric facilities for private and general use (< 500 kW).
- (Regulation) Obligate electric business operators to register and regulate their operation.

### 4. Electric Appliances and Materials Safety Act

- (Objective) Preventing dangers and hazards of electric facilities caused by electric appliances.
- (Regulation) Control manufacture and sales of electric appliances.

## **Chief electrical engineer system for electric facilities for private use**

### **Obligations of private users**

- Appoint a chief engineer who has a chief engineer's license.
- Notify the appointed chief electrical engineer to the authority concerned.
- Make employees follow the instructions of the chief electrical engineer.

### **Qualification and role of chief electrical engineers**

- A license was granted by the authority concerned to those who have necessary academic background and work experience, or those who have passed the licensing examination upon application.
- The chief electrical engineer is responsible for supervising safety in the installation, maintenance and operation of electric facilities.

### **Exemption in appointing a chief electrical engineer (entrustment)**

- A legal system that authorizes entrustment is provided for small businesses which are difficult to employ a dedicated chief electrical engineer on an exemption.
- Entrustment conditions
  - The electric facility in question is for private use smaller than 7 kV in capacity and approved by the authority concerned to be safe for outsourcing.
  - An agreement is concluded with a company (electric safety corporation) that satisfies legal requirements to entrust the safety supervision on the site.

# Outline of safety management system for electric facilities and the Electrical Safety Inspection Association

**(HV and EHV)**

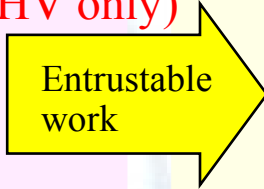
## Electric facilities for private use

Users are required the independent safety measures

### **[User's obligation]**

- To maintain the facilities to ensure conformity to the technical standards.
- To establish safety regulations and notify the authority concerned, and then observe them.
- To appoint a chief engineer and notify the authority concerned. (or to apply for approval of entrustment), etc.

**(HV only)**



- Monthly inspection
- Annual inspection
- Accident response etc.



**Electrical Safety Inspection Associations founded in 1965**



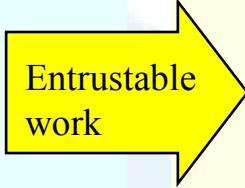
**(LH)**

## Electric facilities for general use

In place of general users who don't have electric knowledge a lot, electricity utilities are obligated to investigate the interior wiring, and promote them to repair the faults.

### **[Utility's Obligation]**

- To investigate the conformity to the technical standard.
- To notify the owner of the need to repair the unconformity of the facilities to the technical standards and risks if he/she left it.



- Completion investigation
- Periodic investigation



## Breakdown of work in the Electric Safety Inspection Association

### Investigation (EF for general use) <Entrusted by the utility>

#### ■ Periodic investigation (100/200V)

Periodic investigation of the conformance of electric facilities used in general dwellings and shops to mandatory technical standards, and notification of results to the owners

#### ■ Completion investigation (100V/200V)

As with periodic investigations, investigation at the completion of construction and notification of results to the owners

### Safety management (EF for private use) <Entrusted by the building/factory owner>

#### ■ Entrusted safety supervision

Safety supervision of 6 KV facilities and part of power generating facilities

#### ■ Testing (6 kV, 22 kV, 33 kV, 77 kV)

Inspection, measurement and testing of electric equipment in buildings and factories where a chief engineer is appointed (support of the chief engineer)

#### ■ Various consulting work

### Public relations activities

#### ■ Public relations

Awareness raising, dissemination and consultation on the safe use of electricity in close contact with local communities

#### ■ Various workshops

Visiting general companies including entrusting companies, residents' associations, and schools to hold various workshops for electric safety

### Business development

#### ■ Electric work

Repairs of defective equipment and electric work for energy saving, etc.

#### ■ Chief engineer's work for PV facilities (mega-solar exceeding 2000 kW)

Dual duties as the chief engineer and electrician are prohibited

## **II. PR of Kansai Electric Safety Inspection Association**

**- Raising awareness of electric safety management -**

## **Outline of PR activity for raising awareness of electric safety**

To accomplish our missions through awareness raising and dissemination of the safe use of electricity, all employees are actively engaged in public relations in close contact with local communities.

### **1. Holding workshops**

- Electric safety workshops (for electric work related persons)
- Electric safety workshops (for general public)

### **2. Activities through mass/advertising media**

- Issue of the “electric safety” magazine

### **3. Contribution to local communities**

- Electric safety and energy classes for children
- Work-study programs for junior high and high school students
- Efforts for raising awareness of the safe use of electricity

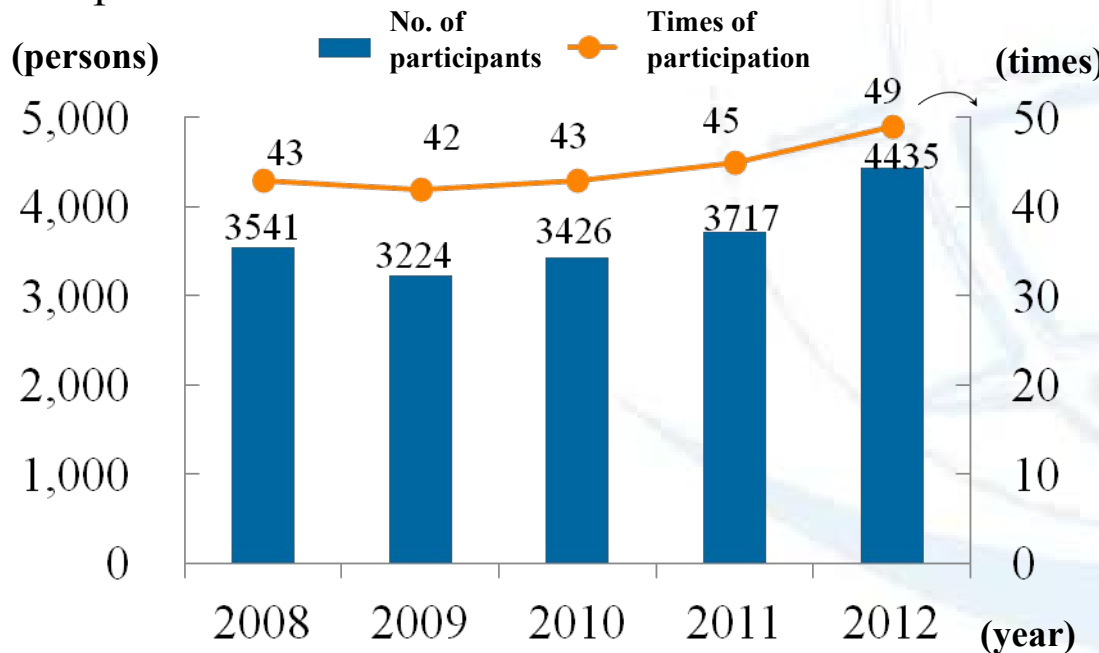
### **4. Routine services**

- Offering consultation to customers on safety management
- Offering consultation to general users on electric safety during periodic investigation

# 1. Holding workshops

## Electric safety workshop (for electric work related persons)

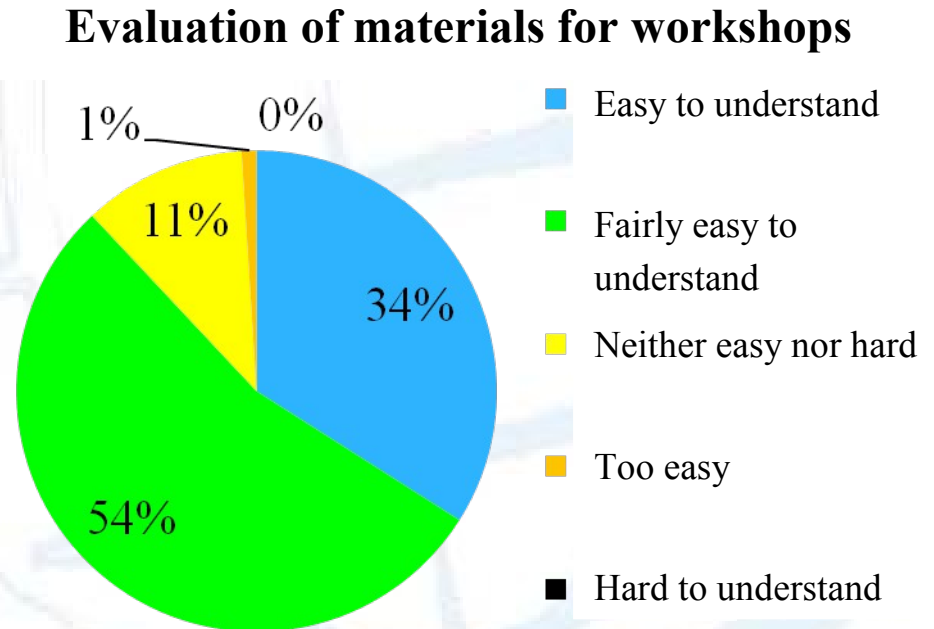
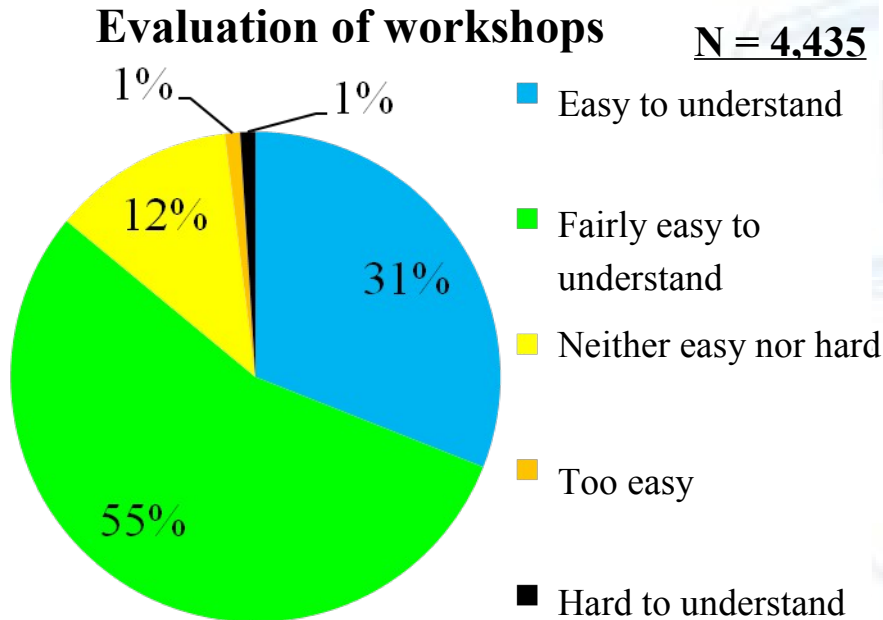
Electric safety workshops concerning “accident cases,” “accident response,” “accident prevention measures,” “introduction of energy saving” and other subjects are held for our clients who entrust us the safety supervision (47,471 business users), chief electrical engineers outside this association, building management companies, and electric work companies.



Electric safety workshop



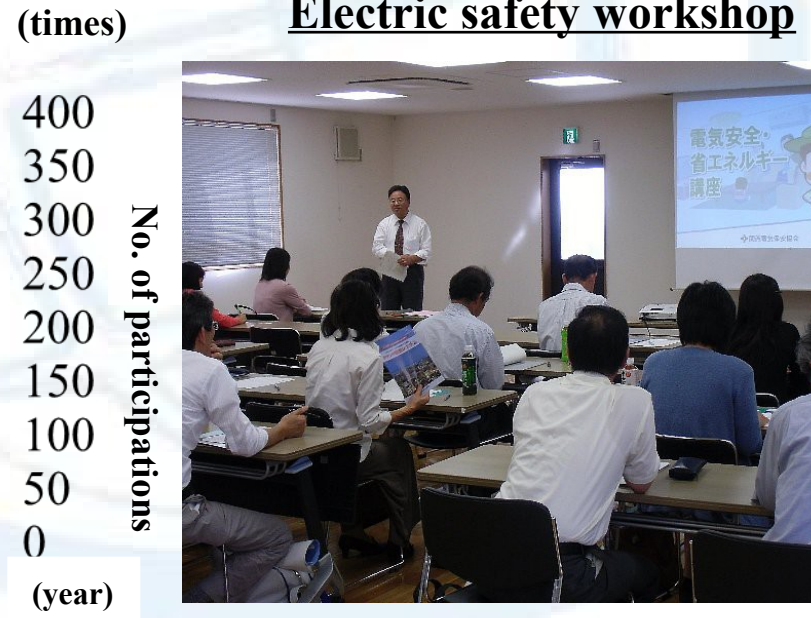
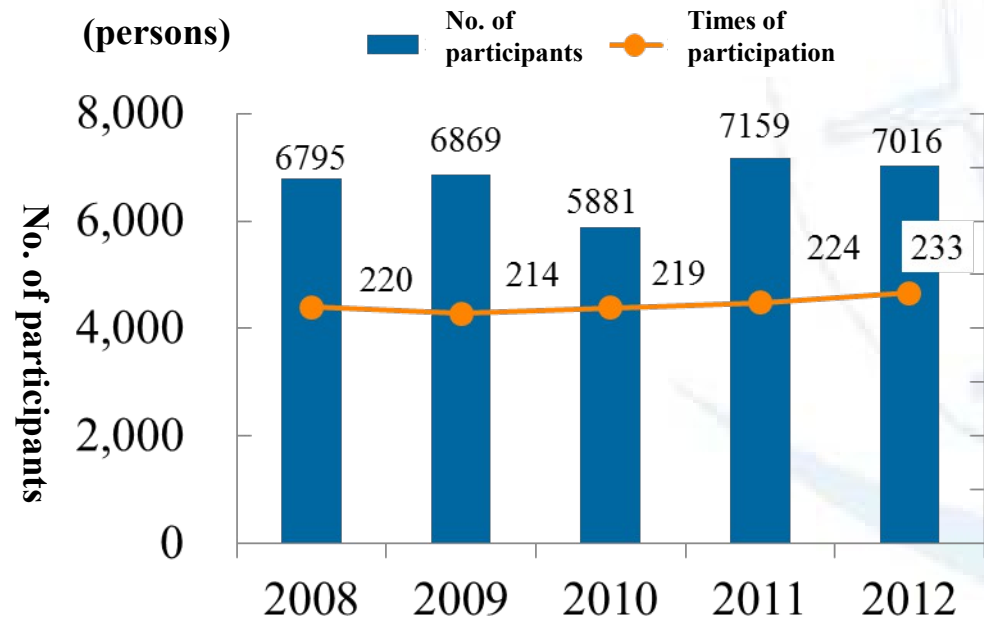
## Evaluation of Electric Safety Workshops (2012)



## Electric safety workshops (for general public)

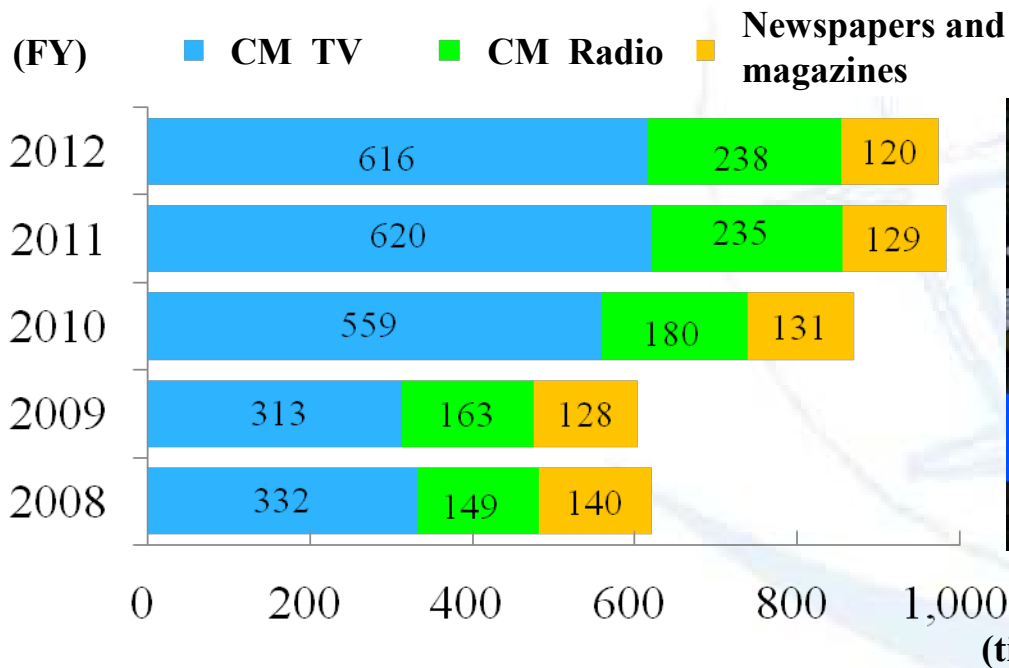
Workshops for general companies and their employees are also held under the themes of “basic knowledge of electric safety” and so on.

Workshops are also provided for general public, residents’ associations, women’s associations and schools under the themes of “safe use of electricity” and “home energy saving,” etc.



## 2. Activities through mass/advertising media

PR activity for the safe use of electricity is one of our important tasks. We extensively use television, radio, the Internet, newspapers, magazines, and our own PR magazine to draw attention from as many people as possible to the safe use of electricity.



### TV advertisement



## PR magazine “Electric safety”

- Bimonthly PR magazine “Electric safety” is part of our awareness raising program for the safe and clever use of electricity.
- The magazine introduces electric accident examples, how to save electricity and energy, much-talked-about projects and corporations in Kansai area, and a wide variety of topics to draw attention from many readers.

### PR magazine: Electric safety

### An examples of article “The nature of electric accident”

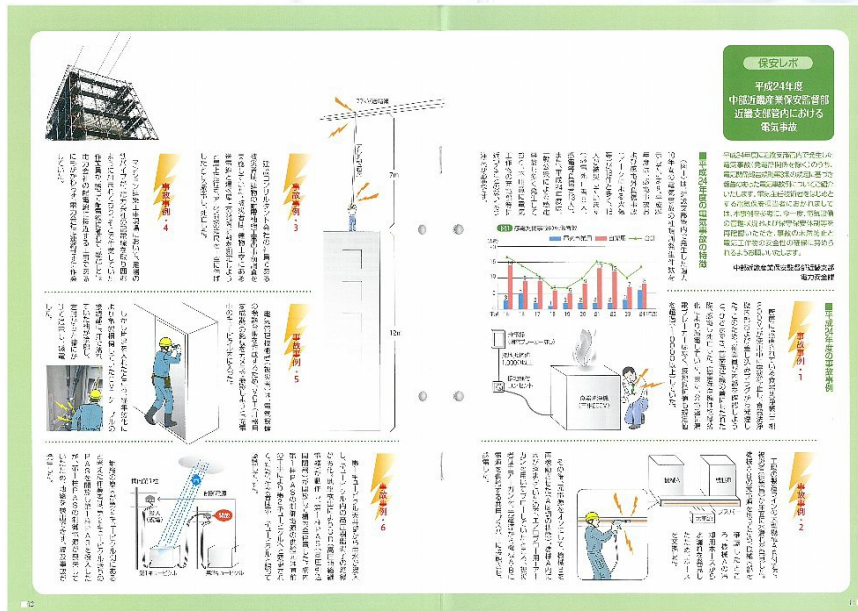
### Main readers

ビジネスをええ上げるソリューションパートナー

**電気と保安** 2013/9-10月号 No.457  
 published by 関西電気保安協会

今月の Topics

- ナニワの町工場を牽けて「はじめロボット43号機」西淀川に立つ!
- 新工法の開発とサイクル事業で次世代の社会づくりに貢献する新築建築現場の姿
- 平成24年度 中部近畿産業保安監督局近畿支部管内における電気事故
- お得な節電シリーズ③ 照明機器のこしこし取り換え方法
- 寒峰に描かれた名水と修験の里 [奈良県吉野郡天川村 洞川温泉]



- Our clients who entrust us the safety supervision
- Public offices, related organizations, municipalities
- Consumer groups. Women’s associations
- Utilities, their affiliates
- Electric work union, electric work companies
- Industrial high schools
- Engineering college
- Universities
- others

324,620 copies (in 2012)



### 3. Contribution to local communities

#### Electric safety and energy class for children

These classes are provided for senior children at elementary schools who learn about electricity while enjoying teaching materials, to raise their awareness of the safe use of electricity.

**132 schools, 9,165 children (in 2012)**



#### Work-study program for junior high and high school students

Upon request of municipalities and schools, junior high and high school students are accepted in our work-study program.

**8 schools, 25 students (in 2012)**



## Efforts for raising awareness of safe electricity use

We participate in the “safe electricity use campaign month” promoted by METI in every August, and raise the awareness of people to prevent electric accidents in cooperation with related bodies.

### Street campaign

Safe electricity use is appealed to as many people as possible in shopping malls and railway station squares.



34 places, 216 persons (in 2012)

### Mobile office for free consultation

A mobile office is opened for free professional advice on electricity easily in cooperation with electric work unions and other bodies.



18 places, 206 offices (in 2012)

### Special inspection of important cultural properties

Inspections of electric facilities in public institutions and cultural properties are conducted free of charge during a special period.



228 places (in 2012)

## 4. Routine services

### Consultation on safety management

#### Request for repairing defective equipment

Inconformity with technical standards found during inspection is notified and a request for repairs is made to maintain the safety of electric facilities for private use and prevention of outage and failure.

**No. of on-site repairs 19,259 (in 2012)**



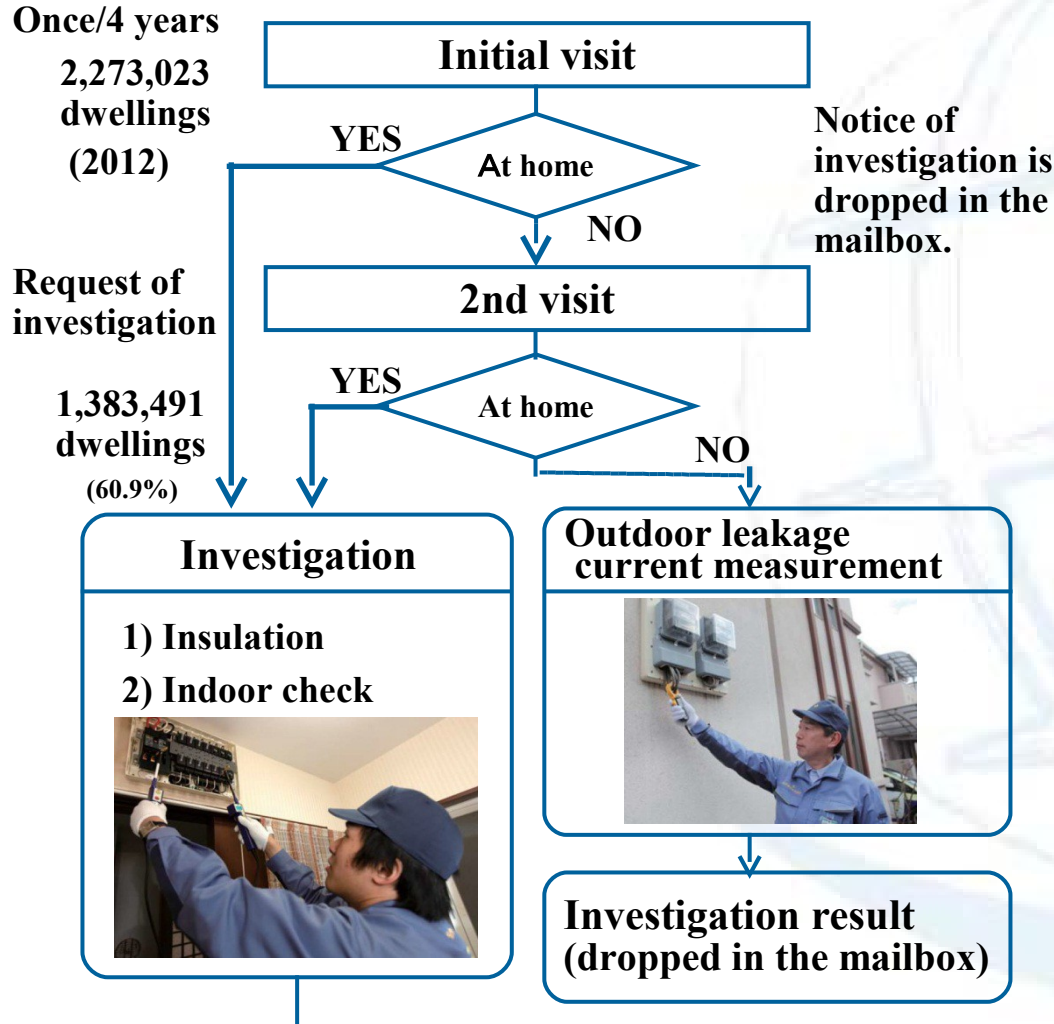
#### Energy saving proposals

Suitable proposals for energy saving and cost reduction are made from a viewpoint of the chief engineer who is familiar with the customer's electricity usage condition.

**No. of electric installations 340 (in 2012)**



## Consultation on electric safety during periodic investigation

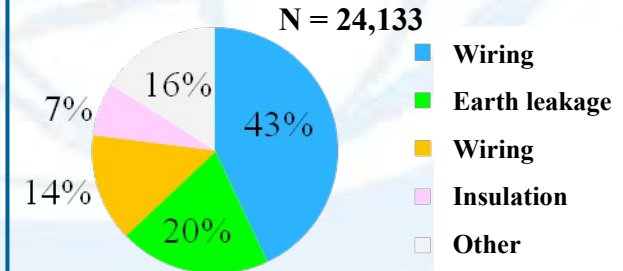


### Notice of investigation result and offering consultation



- Danger of defects, if any, is explained and repairs are requested.
- An electric safety brochure, etc. is used to raise the consumer's awareness of electric safety.

### Defects of electric equipment (2012)



# Raising consumer's awareness during periodic investigation

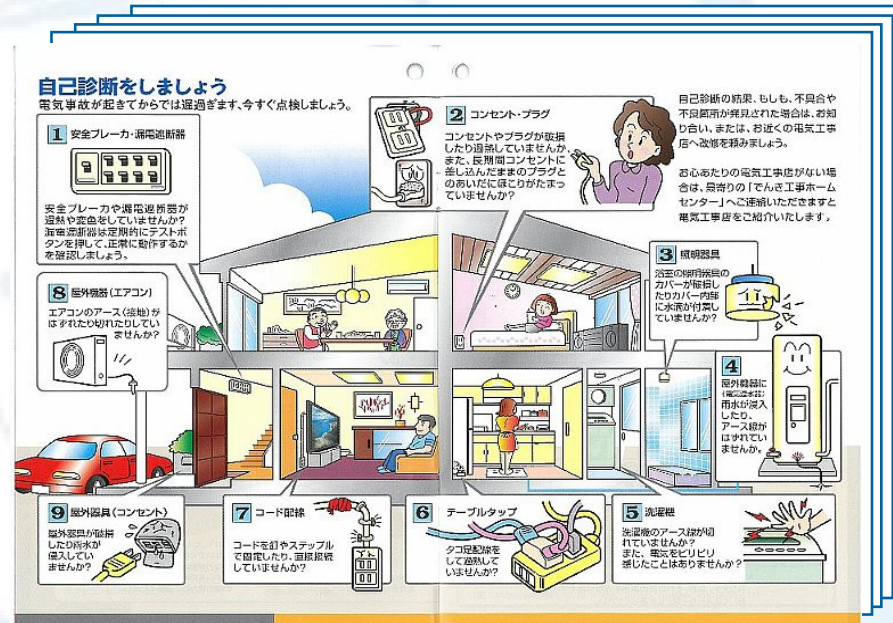
Safe use of electricity is explained to consumers using an electric safety brochure during periodic investigation for raising their awareness of electric safety.

2,273,023 dwellings (2012)

## Distribution of "Safe Use of Electricity"



## Content: Failure diagnosis of electric equipment

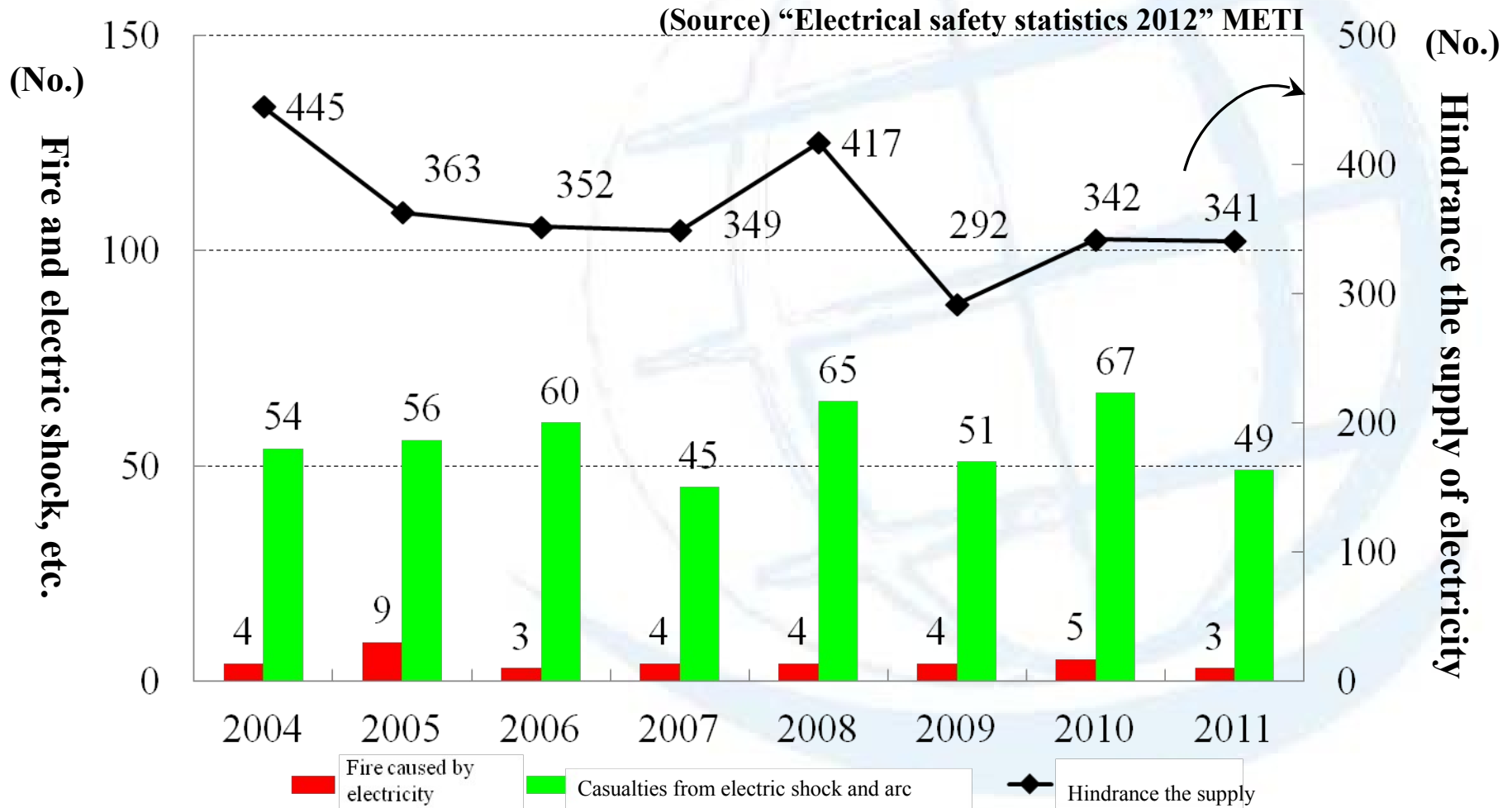


- Danger of amateur work
- Self-diagnosis of electric equipment
- Actions taken during power-off
- Techniques for clever use of electricity
- Proper usage of electric appliances
- Earth leakage breaker to prevent electric shock and fire
- Notice of the safety inspection system for electric appliances used for a long time
- Where to request repairs
- If an earthquake occurs:

A large, faint, light blue globe with a grid of latitude and longitude lines is centered in the background of the slide.

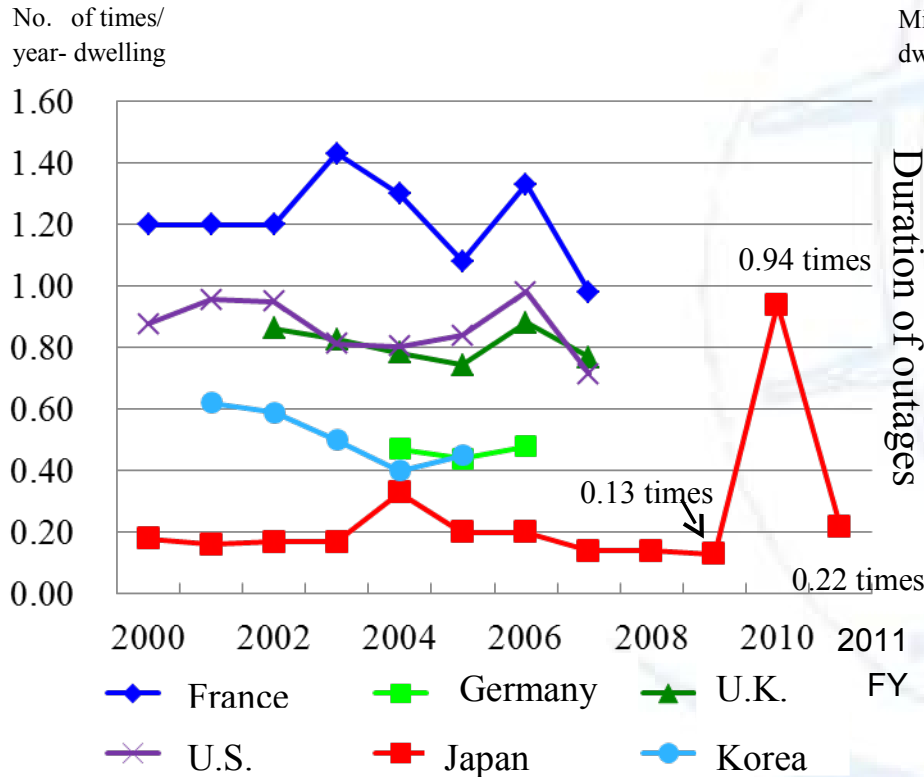
## **III. Accidents relating to electric facilities for private use and reliability of power supply**

## Accidents relating to electric facilities for private use (Japan)

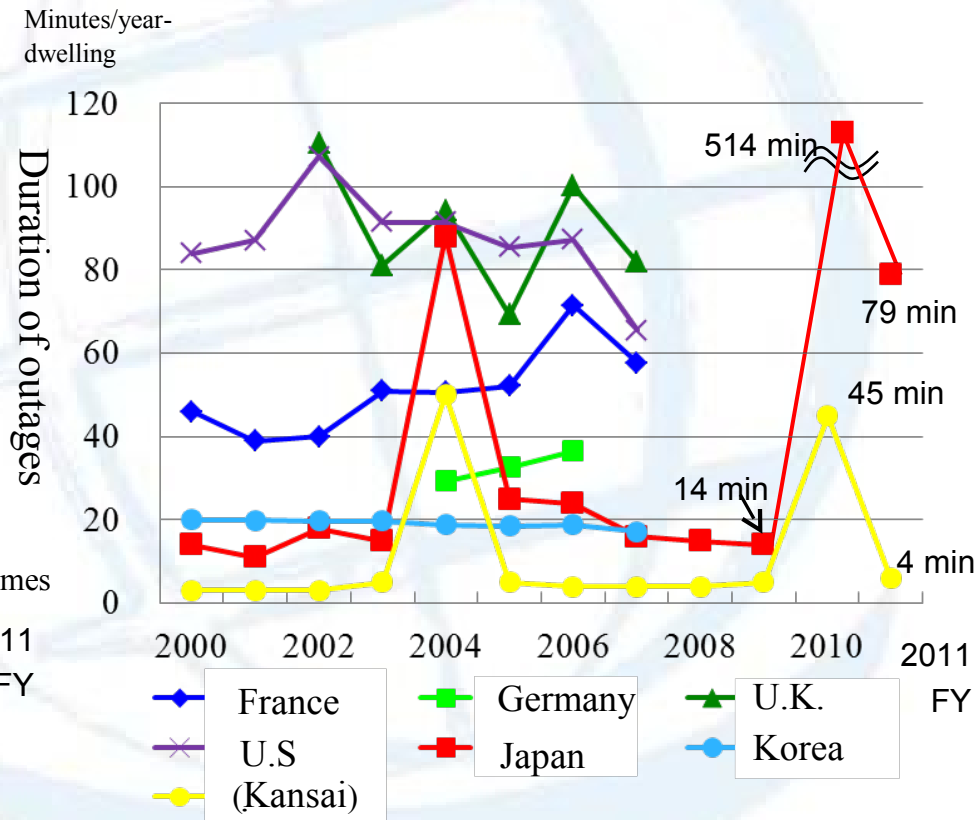


## Reliability of power supply in various countries

**No. of times of annual outages/consumer**



**Duration of annual outages/consumer**



(Source) METI “Energy White Paper 2010”,  
 FEPC “INFOBASE 2012”

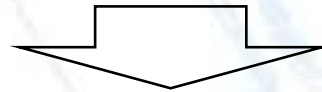


## **IV. Summary**



## Summary

- **The chief electrical engineer system holds the important position of electric safety laws and regulations in Japan, and the Electric Safety Inspection Associations are the foundation of this system.**
- **The Electric Safety Inspection Associations across the country focus on the safe, easy and comfortable use of electricity through the electric safety investigation for dwellings, and the safety management service for factories and buildings.**
- **Our mission is to disseminate safe electricity use throughout the society via TV advertisement, PR magazines, and communication with consumers in routine services.**



**We are committed to contributing to the realization of a society in which the use of electricity is easy and comfortable without outages, mainly by means of ensuring electric safety through customer services, dissemination of safe electric use and promotion of energy saving to prevent fire, electric shock and other electric hazards.**

# THANK YOU

