

# **Outline of Public Acceptance Activities for Nuclear Energy in Japan**

**Submitted to the Public Information Seminar in Cuba  
May 17 - 19**

**Akihiro KUROKI  
Co-ordinator  
Special Projects  
Division of Public Information  
IAEA**

# Contents

## I PA Activities

1. Telephone Q&A Box .....	1
2. Information Service Network System "Atomnet" .....	2
3. Information Supply System "Eneputer" .....	3
4. Activities Through Mass Media .....	4
5. Dispatch of Lecturers .....	5
6. Nationwide Lecture "Caravan" .....	6
7. Nuclear Power Plant Visit .....	7
8. Round-Table Conference .....	8
9. Public Relations for Women .....	9
10. Science Pavilion for Children .....	10
11. Itinerant Exhibition of Energy .....	11
12. Seminar for Teachers .....	12
13. Nuclear Power Study Courses .....	13

## II PA Materials

### 1. Materials for the General Public

#### (1) Leaflet

1) "Energy Q&A" .....	14
2) "Nuclear Power Watching" .....	15

#### (2) Video

1) "Door to the Oasis" .....	16
------------------------------	----

#### (3) Explanatory Books

1) "Nuclear Power Generation—Its Necessity and Safety" .....	17
2) "To Think About Energy Issues" .....	18

#### (4) Newsletter

1) "Newsletter on Nuclear Energy" .....	19
---	----

## 2. Materials for Women

(1) Pamphlet	
1) "Signal for Tomorrow" .....	20
(2) Organ	
1) "Ene-mate Club" .....	21
(3) Advertisements on Women's Magazines	
1) "That's Why We Think About Energy Seriousy" .....	22

## 3. Educational Materials for Youths

(1) Leaflet	
1) Cartoon —"?"—Great Adventure .....	23
(2) Video	
1) "Let's think of Energy" .....	24
2) "Wonder Motton" .....	25
3) "Cyber Remmy" .....	26
4) "Amusing Quizes on Energy" .....	27
5) "Energy Q&A with 'Mach'" .....	27
6) "The Earth Is Our Treasure" .....	27
7) "Nuclear Power and Electric Energy" .....	27
(3) Wall Newspaper for Elementary School	
1) "Indeed! It's the Energy" .....	28
(4) Supplementary Books for Education	
1) "Energy Handbook" .....	29
2) "Energy Why & What" .....	29
(5) Information Papers for Teachers .....	30

## I PA Activities

### 1. Telephone Q&A Box



1. Purpose: To make an unbiased knowledge of energy/nuclear energy issues spread and to help deepen understanding on the issues.

2. Contents: Various kinds of questions on energy, electricity, nuclear energy and related matters raised

from the public shall be answered by telephone. Not only simple questions but also requests for numerical data and reference materials shall be accepted. Anybody has access to this service through free charge telephone.

3. Target: The general public

4. Specifications:

Hours of service: Monday through Friday (except holidays),  
10:00-12:00, 13:00-17:00

Free charge telephone: Call 0120-119433 (domestic call only)

あなたの“?”をお聞かせ下さい

原子力  
テレפון ?  
質問箱

エネルギー  
電気・原子力…  
なんでも聞いてください



## 2. Information Service Network System "Atomnet"



1. Purpose: To provide accurate and up-to-date information on energy/nuclear energy through personal computer communications.
2. Contents: Information service network system on nuclear energy, called "Atomnet," is accessible through an ordinary telephone line with the aid of a personal computer or a word processor that has a communication function. No registration of a password is required, making it easy for anyone to receive this service. No charge other than normal telephone

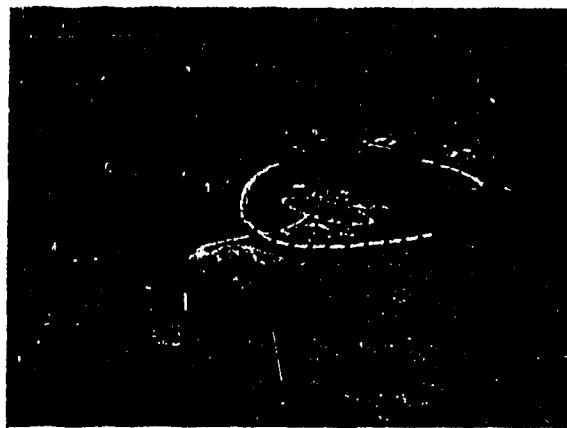
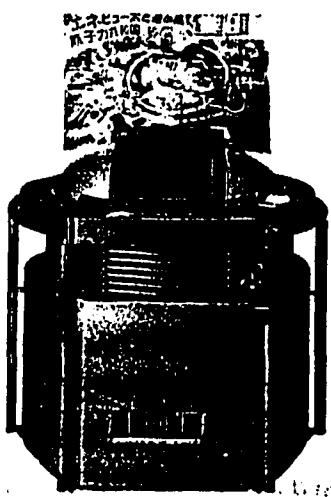
charge is required. This service is available to anyone around the clock except on the year-end and New Year holidays. (Explanatory leaflet, "Guide of Atomnet," is available.)

### (Contents of Information)

- (a) "Bulletin Board" (News-related information on nuclear energy)
- (b) Information on troubles
- (c) Information on administration of radiation
- (d) General information on nuclear energy
- (e) General information on energy
- (f) Newsletter (See page 19.)
- (g) Glossary of technical terms on nuclear energy
- (h) Methods of using the "Atomnet" (Directions for using the "Atomnet" and precautions for handling the system)

3. Target: Users of personal computer communications and the general public (Since no registration of a password is required, anybody who has a personal computer or a word processor that has a function of communications can use this service.)

### 3. Information Supply System "Eneputer"



1. Purpose: To help the general public deepen their understanding of and get interested in energy/nuclear energy and environmental issues by giving an easy-to-understand account with the aid of images and sound.
2. Contents: Various kinds of information on energy/nuclear energy and environmental issues shall be provided at personal computer terminals. Users of this system can, by simply touching CRT screen, explore with "Eneputer" various facilities in the "Republic of Nuclear Energy" such as a nuclear power station and an energy pavilion. This system is designed so that users can obtain knowledge while enjoying clearly and vividly projected moving pictures and high-quality sound for which the state-of-the-art multimedia technologies are employed.

The exploration of the "Republic of Nuclear Energy" can be made, in addition to taking a tour of various facilities at random, by following courses set in accordance with common themes by bus. The system can be linked with the "Atomnet" (See page 2), enabling users to get updated information easily.

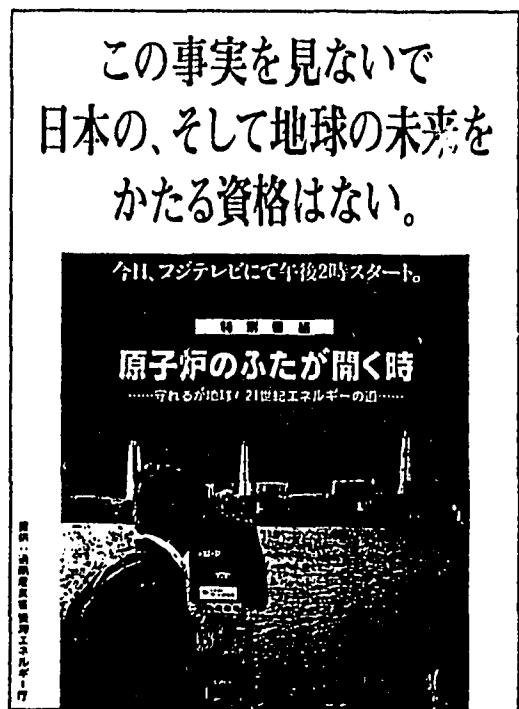
3. Target: Elementary and junior high school students, and adults

4. Inauguration of the service: March 1992

5. Places where this system is installed:

Local government buildings, public halls, science museums, nuclear energy public relations halls, etc. (Installation of this system was started in 1991 and the number of such places increased to 60 as of March 31, 1993)

#### 4. Activities Through Mass Media



1. Purpose: To deepen the nation's unbiased understanding of energy/nuclear energy
2. Contents: Employing television, radio, newspapers, magazines and other kinds of mass media, publicity is sought to make the nation note the actual situation of energy in Japan, covering increased energy demand, relations between energy and people's modes of living, various restrictions on energy supply, development of new energy resources, etc. In fiscal

1993, we sponsored Fuji Television's special program for nuclear power entitled "When the Cover of a Nuclear Reactor Is Opened," and placed commercials with "Weekend Sports," a TBS radio sports news program, etc. In addition, a series of advertisements on nuclear energy were placed on the Asahi, Mainichi and other major newspapers.

3. Target: General workers etc.

## **5. Dispatch of Lecturers**

1. Purpose: To dispatch suitable lecturers to lecture meetings and workshops of various kinds on energy/nuclear energy at the request of local governments so that such events may be easily held.
2. Contents: In compliance with requests from local governments tackling nuclear issues or from organizations recommended by local governments, lecturers shall be sent to such events on energy/nuclear energy as various lecture meetings, study meetings, gettogethers and a variety of general meetings.
3. Target: Attendant in lecture meetings and other kinds of events.

## **6. Nationwide Lecture Caravan**

- 1. Purpose:** To hold lecture meetings and panel discussions on energy/nuclear energy issues so that general local residents in the areas where each regional Bureau of International Trade and Industry has jurisdiction may deepen their understanding of the issues.
- 2. Contents:** Lecture meetings are held under the theme of energy/nuclear energy issues at major cities across the country, where prefectural governments are located and each regional Bureau of International Trade and Industry has jurisdiction. In addition, we sponsor report on local newspapers on the basis of part of such events (newspaper symposiums), aiming at helping local people increase knowledge and deepen understanding of the issues.
- 3. Target:** Local residents in the areas where each regional Bureau of International Trade and Industry has jurisdiction (especially those who are interested in participating in such events).

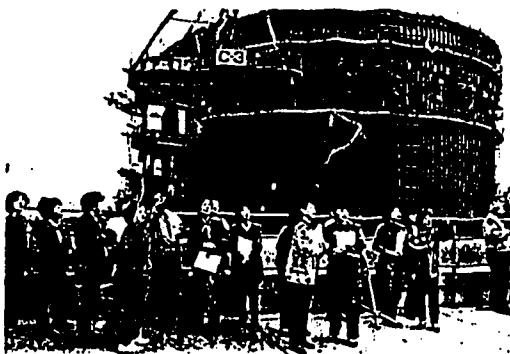
## **7. Nuclear Power Plant Site Tour**

- 1. Purpose:** To have opinion leaders in each region participate in site tour of a nuclear power plant so that they can deepen their understanding of energy/nuclear energy from firsthand experience.
- 2. Contents:** The site tour shall be organized for local people centering around opinion leaders so that they can deepen their understanding of energy/nuclear energy from firsthand experience at such facilities. This program shall be carried out in the areas where each regional Bureau of International Trade and Industry has jurisdiction.
- 3. Target:** Opinion leaders and others in the areas

## **8. Round-Table Conference on Nuclear Energy Issues**

- 1. Purpose:** To exchange opinions concerning energy/nuclear energy issues in a round-table conference attended by intellectuals in each local area for a dual purpose of helping such people promote their understanding and of cultivating human resources as well as finding prospective lecturers.
- 2. Contents:** In the areas where each regional Bureau of International Trade and Industry has jurisdiction, a round-table conference for a small number of college professors, men of culture and other local intellectuals shall be assembled to discuss energy issues centering around the development of nuclear energy. Opinions shall be exchanged on the development of nuclear energy and the promotion of the people's understanding of such development, while finding prospective lecturers and panelists is another objective of this program.
- 3. Target:** Opinion leaders in the areas where each regional Bureau of International Trade and Industry has jurisdiction.

## 9. Public Acceptance Activity for Women



1. Purpose: To encourage women, centering around housewives, to have unbiased understanding of energy-related issues

2. Contents: Three publicity programs have been implemented towards women.

(1) To organize "Ene-mate," women's group chosen among those interested in energy issues who were publicly invited for nationwide screening and to offer various occasions for considering energy issues to them such as site tours, lecture meetings, panel discussions and

roundtable discussions. "Ene-mate Club," a bulletin on the "Ene-mates," is published three to four times a year to exchange opinions of them and further to introduce activities to general women other than them.

(2) To publish basic knowledge of and data on energy in the form of advertisements in journals for women such as "Orange Page" and "Shopping," aimed at having such women recognize "Increase in Energy Demand," "Importance of the Most Efficient Mixture of Energy Sources," etc.

(3) To establish the "Women's PA Study Meeting on Nuclear Energy," composed of women in charge of public acceptance working for nuclear energy-related organizations, with the aim of studying how public relations activities for women should be and of producing specific P. A. materials.

3. Target: General women

## **10. Pavilion of Science for Children (movable exhibition)**

**1. Purpose:** To promote understanding of the need and the safety of nuclear power generation on the part of general citizens, especially young people, living on the site for a nuclear power plant, on the planned site for such facilities and in big cities in terms of general scientific and technical knowledge.

**2. Contents:** Such event shall be composed primarily of exhibitions of "participation/experience type" which can be closely observed and touched so that visitors' interest in general science and technology may be deepened while enjoying themselves. Essentially, the exhibits shall be aimed at helping visitors acquire an unbiased knowledge and understanding of energy/nuclear energy.

**(1) Composition of Exhibits (About 40 exhibits)**

**1) Play-With-Energy Corner**

(Power plant operation game and others)

**2) Wonder-of-Science Corner (Sound parabola and others)**

**3) Heart-Leaping-Experience Corner**

("Fluffy Space Shuttle" and others)

**4) Stereoscopic Film Theater Corner**

("Energy Wonderland" — 13 minutes, and others)

**5) Hi-Vision Theater Corner**

(Videotape, "Cyber Remmy" — 14 minutes, and others)

**(2) Site Facilities: Gymnasium and lot with a total space of some 1,000 m<sup>2</sup>**

**(3) Duration: From three to five days (In addition to the actual days of exhibition, three days are needed for preparation and one day for removal of exhibits and others.)**

**(4) Target: Elementary and junior high school students and the general public**

**(5) Administration of the Event:**

**Sponsors:** Agency of Natural Resources and Energy and the host city, town or village autonomy

**Supporters:** the Board of Education of the host city, town or village, the host prefectural government, and the Board of Education of the host prefecture

**Planning and Management:** The Foundation of Osaka Science and Technology Center

## 11. Itinerant Exhibition of Energy

1. Purpose: Electric energy is one of the kinds of energy, of which no proper understanding has been obtained from people despite the fact that it plays a very important role in their daily life. For this reason, electric energy was chosen as the main theme of this exhibition, which, as a means of supporting school education, is aimed at helping people in general living in city areas, especially young people, learn the importance of electric energy comprehensively and scientifically so that they may promote their understanding of the necessity of nuclear power generation.
2. Contents: This exhibition shall be held at museums and science museums across the country as a special event. The exhibition shall be organized in such a way as to help visitors learn about electric energy smoothly through various programs involving their participation and experience.
  - (1) Composition of the Exhibition (about 20 exhibits)
    - 1) Electricity in Nature (Prologue)  
An aurora creation system and others
    - 2) Discovery of Electricity (Room for Discovery)  
Franklin's Experiment and others
    - 3) Use Electricity (Room for Transparent People)  
The stage for actorless play
    - 4) Generation and Transmission of Electricity (Room for Power Generation)  
Nuclear power plant model and others
    - 5) Consider Electric Energy (Room for Future Energy)  
Jumbo picture-story show and others
  - (2) Site Facility: A special exhibit room with a floor space of about 300 m<sup>2</sup> in a museum or a science museum
  - (3) Duration: For about two weeks (In addition to the actual exhibition days, three days are needed for preparation and one day for removing the exhibits.)
  - (4) Target: Elementary and junior high school students and the general public
  - (5) Administration of the Event: Sponsors: Agency of Natural Resources and Energy, the host museum and the host local autonomy  
Supporters: the hosting prefectural governments and the Board of Education of the hosting cities, towns or villages and others  
Planning and Management: The Foundation of Osaka Science and Technology Center

## **12. Seminar for Teachers**

- 1. Purpose:** To contribute to conducting energy education, by giving systematic and brand-new information and knowledge of energy issues to teachers in charge of energy-related courses through seminars in which, among others, lectures, study of teaching and tours of energy-related facilities are incorporated.
- 2. Contents:**
  - \* Lectures by experts
  - \* Presentation of examples of actual educational programs on energy
  - \* Tour to energy-related facilities
- 3. Target:** Elementary, junior high and senior high school teachers in charge of science and social studies and others
- 4. Number of seminars held:** 15 in 1992 FY and 21 in 1993 FY.

### 13. Nuclear Power Study Course

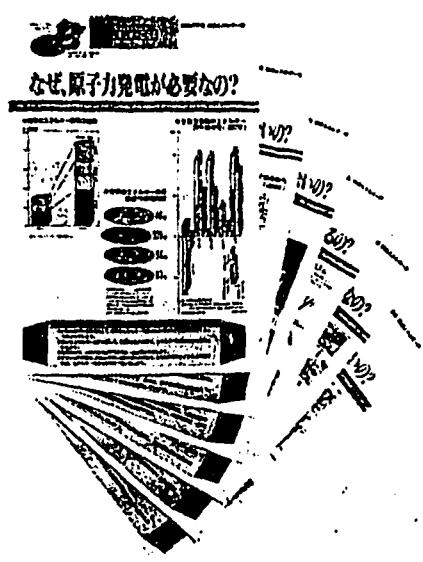
1. Purpose: To encourage the staff in local governments, who have many chances of meeting with local residents, to acquire nuclear power-related knowledge so that they can spread knowledge of energy/nuclear energy to local people.
2. Contents: The following four levels of study courses and tours of a nuclear power station shall be organized for the staff in local governments that have jurisdiction over the site or a planned site of a nuclear power station so that such events may help such staff become familiar with practical knowledge about energy/nuclear energy. Such staff are expected to be instrumental in providing knowledge of and information on such issues to local residents.
  - (1) *Study course for the staff newly assigned for nuclear-related administration*  
The course shall be aimed at acquisition of wide knowledge of nuclear energy and designed for beginners of nuclear business.
  - (2) *Study course for the working staff in charge of nuclear-related administration*  
The course shall be aimed at cultivating capabilities of handling nuclear-related administration efficiently and designed for the working staff who have finished the above course (1).
  - (3) *Study course for leaders in local government*  
The course shall be aimed at cultivating capabilities of supporting the chief of the local government on matters of nuclear energy and designed for the city, town or village mayor assistant and the section chiefs or officials of the similar ranking of such local governments in charge of a planned site for a nuclear power station.
  - (4) *Study course for specialists*  
The course shall be aimed at acquisition of specialized knowledge of classified areas and designed for officials who have finished the above course (2) for the working staff in charge of nuclear-related administration or any course equivalent to (2).

## II PA Materials

### 1. PA Materials for the General Public

#### (1) Leaflet

##### 1) "Energy Q&A"



1. Purpose: To help people understand "energy" from a wide perspective in terms of nuclear energy, new energy sources and environmental issues

2. Contents: In response to what, why, how, etc., this leaflet can give ready answers to even such questions as given below that are likely to be posed by the general public and often become the source of wonder for people in response. Confirmative and convincing data on the energy situation observed in daily life are edited and compiled in such a way as to be grasped visually.

Representative "Questions" are given and, in answering them, related information is provided so that readers may be able to grasp energy from a wide viewpoint.

- (a) What are reasons for acid rain and global warming?
- (b) Why isn't saving of energy sufficient to make up for the shortfall of energy?
- (c) Why isn't natural energy used more?
- (d) Why is nuclear power generation necessary?
- (e) Why doesn't Japan discontinue nuclear power generation and import electricity?
- (f) Why does Japan need to recycle spent nuclear fuels?

3. Target: The general public

4. Specifications: Composed of 12 fully-colored pages of A4 size (six sheets)

## 2) "Nuclear Power Watching"



1. Purpose: To deepen understanding of the nuclear power generation system and its important facilities and equipment

2. Content: This leaflet, compiled for people who have more than basic knowledge of nuclear power generation, covers detailed accounts on the nuclear power generation system and important facilities and equipment. Sketches and other visual aids are used to make it easier for readers to understand.

- (1) Power generation systems of pressurized water reactor (PWR) and boiling water reactor (BWR) -Schematic system diagram and accounts on the step-by-step process of power generation starting from heating.
- (2) Structure, function and size of PWR and BWR reactors.
- (3) Structure, size and kinds of fuel assemblies for PWR and BWR.
- (4) Driving mechanism, and function of control rods of PWR and BWR and their actuation in an emergency.
- (5) Emergency core cooling systems of PWR and BWR-Schematic system diagram, purpose and function.
- (6) Structure, function and size of PWR's steam generator.
- (7) Structure, function and size of BWR's recirculating pump

3. Target: The general public and lecturers

4. Specifications: Composed of 12 fully-color pages of A4 size (six sheets)

(2) Video Tape

1) "Door to the Oasis"



1. Purpose: To get youths and general public to understand measures taken to ensure safety of nuclear power stations by introducing examples of tests on the safety of nuclear power operation.
2. Contents: Various tests and study of safety has been conducted to ensure safety of nuclear power generation. Some governmental justification tests are introduced to show the extent of safety measures taken.

Many of the conventional video tapes simply show how such tests are conducted, failing to arouse the interest of young people and the general public.

This video tape has a story that a girl who started from a desolate place has various adventures and experiences and finally reaches a utopia relying on nuclear power. Without damaging the story, Proving Tests on Reliability of Fuel Assemblies and on Seismic Reliability and some other tests are introduced.

3. Target: Junior and senior high school students and the general public
4. Specifications: Colored, about 17 minutes, VHS

(3) Explanatory Book

1) "Nuclear Power Generation—Its Necessity and Safety"

**'93 原子力発電**  
その必要性と安全性



1. Purpose: To answer questions of people who want to know more about the necessity and safety of nuclear power generation and thereby remove their anxieties.

2. Contents: This is an excellent explanatory book on nuclear power generation featuring a comprehensive account with many graphs, illustrations, pictures, etc. that make the book as easy as possible to understand.

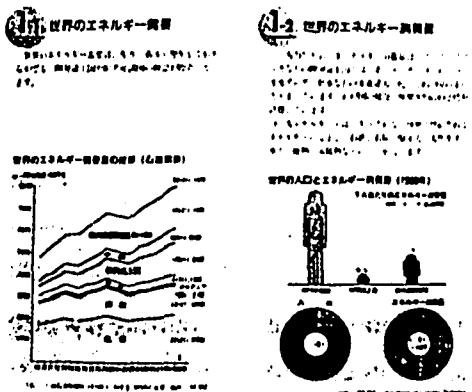
This book is composed of 8 chapters written below, covering all the important items relating to nuclear power generation that begin with the energy situation and emphasize the necessity and safety of nuclear power generation. This can be called a PA textbook of nuclear power.

- (1) People's daily life and energy
- (2) Development situation of nuclear power generation
- (3) System of nuclear power generation
- (4) Safety of nuclear power stations
- (5) Nuclear power stations and control of radiation
- (6) Efficient use of uranium resources
- (7) Nuclear power stations and local communities
- (8) Publicity of nuclear power

3. Target: The general public and PA staffs

4. Specifications: Composed of about fully-colored 100 pages of B5 size, published once a year

## 2) "To Think About Energy Issues"



1. Purpose: To explain various issues on energy to opinion leaders so that they may deepen their understanding of energy/nuclear energy.

2. Contents: Basic information and the latest data necessary to study various issues on energy such as concern about a possible shortage of supply to demand, energy development's effects on the earth's environment, and the necessity and the safety of nuclear power generation are compiled in this book in a simplified manner and on the basis of one issue for each page. Some 70 items are taken up mainly with ample use of colored figures and pictures associated with simple explanations to facilitate understanding. Convenient to carry, it is as compact as a passport with the thickness of about 5mm.

### Contents of information

- [1] Energy situations of Japan and the world
- [2] Energy and the earth's environment
- [3] Saving of energy
- [4] New energy sources
- [5] The most efficient mixture of energy sources
- [6] Characteristics of nuclear power generation
- [7] Safety of nuclear power generation
- [8] Nuclear fuel cycle
- [9] People's daily life and radiation

3. Target: Opinion leaders, especially legislators, newspaper reporters, people involved in education, organization directors and others who need a wide range of information

4. Specifications: Composed of 94 fully-colored pages as compact as a passport, it looks like a pocket-book.

#### (4) Newsletter

##### 1) "Newsletter on Nuclear Energy"



1. Purpose: To diffuse accurate knowledge among the people by providing timely information and current topics on energy/nuclear energy, environmental issues, etc. monthly with accounts easy to understand.

2. Contents: The information provided includes not only that on energy/nuclear energy but also that on a wide range of areas such as science in general, economics and culture so that opinion leaders and people in charge of publicity may use such information as a topic at lecture meetings and on other occasions.

We make it our motto to express plainly and friendly and explain difficult topics on science, technology, etc. in a simple way in this magazine. Many current topics with news value are also covered in this magazine, contributing to increasing its role as an information magazine. Based on the principle of one issue for one page, the monthly takes up 7-8 subjects at a time, making its volume reasonable for reading. Certain space for publicity through interactions with readers is set aside in the form of "Readers' Forum" and "Q&A Corner." This magazine can also be used as a leaflet.

3. Target: Opinion leaders and people engaged in the P. A.

4. Specifications: Composed of about 12 pages of A4 size, this magazine with a circulation of about 36,000 is published once a month.

## 2. PA Materials for Women

### (1) Pamphlet

#### 1) "Signal for Tomorrow"



1. Purpose: To get women centering around housewives interested in and to understand general issues of energy and understand them
2. Contents: This leaflet has a touch of a refined and illustrated pamphlet, with explanations from a living point of view on energy which is normally used without due recognition of its importance. Subjects taken up include the importance of energy, the necessity of nuclear power generation and the importance of conserving the environment. This is one of the most suitable guides for women who want to start considering energy problems because of plain accounts on energy issues in general.
3. Target: General woman such as housewives, female office workers
4. Specifications: Composed of 18 colored pages of modified A4 size

(2) Organ

1) "Enemate Club"



1. Purpose: To get those women who are concerned about nuclear energy and radiation to deepen knowledge of energy
2. Contents: This publication, as an organ for "Ene-mates," introduces activities such as lecture meetings and site tours for "Ene-mates," female applicants recruited from general women as part of our publicity activities for women. Also introduced are opinions and impressions of the "Ene-mates" as well as descriptive articles to promote essential knowledge of energy.
3. Target: Women in general
4. Specifications: Composed of 8 colored pages of A4 size and published three to four times a year. Its circulation in fiscal 1993 is about 36,000.

### (3) Advertisements on Women's Magazines

#### 1) "That's why we think about energy seriously."



1. Purpose: To get women centering around housewives to understand the actual situation of energy

2. Contents: We have placed a series of advertisements in such women's magazines as "Orange Page" and "Shopping"

throughout the year since fiscal 1991, introducing basic knowledge of and data on energy-related matters every month. The annual series of ads is aimed at getting "the rising demand of energy" and "the importance of the most efficient mixture of energy sources" understood widely among women. "That's why we think about energy seriously" is the catchword for the serialized ads continued through fiscal 1993. In other words, the ads are designed to introduce people's seriousness in coping with energy issues in their daily life as shown below.

- \* Though my folks do not waste electricity, our monthly consumption of electricity is much greater than years ago.
- \* As I play three roles-as a wife, a housewife and a female salary earner, I have to depend on a convenience store.
- \* Whenever I am surprised at rapid changes of the times, I am keenly aware of the swelling volume of Japan's energy consumption and renew my resolve to economize on its consumption.
- \* Though I cautioned my daughter who pushed the button of our air-conditioner for "intense," saying, "No longer tolerable," I myself was really trying hard to endure the heat.
- \* I rely on a robot for troublesome work, dreaming about a future society with much greater conveniences of life.

3. Target: Women centering around housewives

4. Specifications: Colored two-page ads on opposite pages of modified A4 size

### 3. Educational Materials for Youth

#### (1) Leaflet

##### 1) Cartoon — "?"—Great Adventure



1. Purpose: To get children to understand overall energy issues while enjoying themselves

2. Contents: This leaflet would light up children's eyes and arouse their interest and get them to understand the contents easily and quickly. While enjoying the cartoon, they come to understand energy immediately.

(1) What is energy? / Now I know a great volume of energy was used to make foods, clothes and buildings.

(2) Today, nuclear power is a reliable energy source! / Nuclear energy is powerful!

(3) Is it true that the earth is getting warmed? / Acid rain is falling throughout the world!

(4) Wasting energy isn't good for us to live in comfort! / I wonder if we cannot make use of such natural energy as sun light and winds yet?

(5) The world's overall energy resources are said to be only that much! / Ah, we have been using oil without knowing that hundreds of thousand years was needed before it was produced and that it is a precious asset of the earth.

(6) Let's use various energy sources while maintaining a balance of their respective roles./In our society, electricity is used in such an extensive area.

3. Target: Elementary and junior high school students

4. Specifications: 12 fully-colored pages of A4 size (6 sheets)

## (2) Video Tape

### 1) "Let's think of Energy"



1. Purpose: To get children to know about energy and, possibly, nuclear energy without forcing them but by letting them enjoy themselves

2. Contents: By using animated characters which children like, this video tape is designed to help children understand the importance of energy and the necessity of nuclear power generation while enjoying themselves. This can be an ideal teaching material for science and social studies classes.

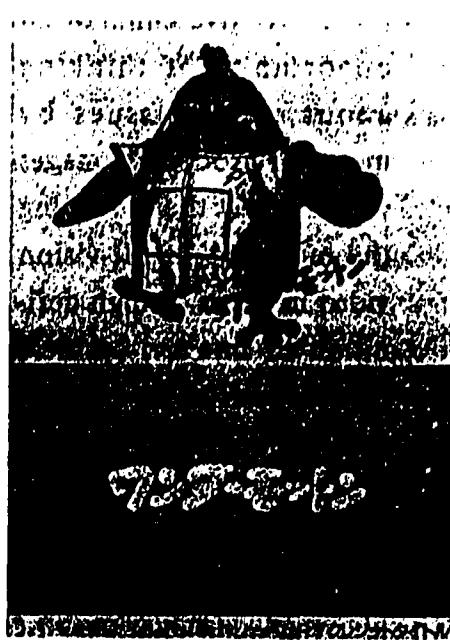
"There is no other planet than this in which we can live in comfort." This subtitle of this video tape is a message of praise to beautiful nature. Two animated characters—a somewhat intellectual hippo and an active bird—explain and gain experience of the necessity of energy for their daily life, environmental issues, characteristics of various energy sources, including new ones, that are friendly to the earth, etc. In addition to the animation, computer graphic arts and beautiful pictures are incorporated to increase the element of amusement that facilitates learning.

The time required for its projection is held to about 12 minutes so that this video tape can be used not only in science and social studies classes and at a lecture meeting.

3. Target: Elementary and junior high school students and adults

4. Specifications: Colored, about 12 minutes, VHS

## 2) "Wonder Motton"



1. Purpose: To give children an opportunity of thinking about energy issues by means of producing images which attract them, making the most out of Hi-vision video in terms of high definition of images, easiness of synthesization and the enlarged screen

2. Contents: In one evening, Hiroshi's father returned home with a curious animal "Motton." "Motton" plays an active part in place of all the electric appliances in his house such

as a television set, an electric iron, a hair drier and a vacuum cleaner and the source of his energy turned out to be electricity. "Motton" grew by eating electricity. Before long, the capacity of electric supply in his house became insufficient to meet the demand of "Motton." Eventually, "Motton" ate out all the electricity generated at a power station and grew too big.

The fact that our daily life depends heavily on electricity is shown in this fable by employing the technique of synthesizing images of stuffed toy "Motton" and other characters.

3. Target: Low- and middle-grade pupils of elementary school

4. Specifications: About 14-minute, colored Hi-vision videotape and Hi-vision videodisc

### 3) "Cyber Remmy"



1. Purpose: To give children an opportunity of thinking about energy issues by means of producing images which attract them, making the most out of Hi-vision video in terms of high definition of images, easiness of synthesization and the enlarged screen.

2. Contents: "Kenta" who wastes electricity without knowing it is the main character of

this Hi-vision video. "Kenta" sets out on a journey transcending time and space led by "Cyber Remmy" who, angered by his dissipation of energy, came out of the world of cartoon and his friends. While traveling, "Kenta" learned that oil is an ancient asset which is limited and precious to mankind. He also learned about the mechanism of nuclear fission that produces nuclear energy, the importance of economizing on electricity and the development of new energy sources.

The general situation of energy is shown in a manner easy to understand and with beautiful images particular to Hi-vision, with the aid of synthesization of actual pictures and animated figures and presentation of graphs produced by computer graphics.

3. Target: Pupils in high grades of elementary school

4. Specifications: About 14-minute, colored Hi-vision videotape, and Hi-vision videodisc

**Video Tapes [the following Nos. 2-4) through 2-7)]**

**1. Purpose:** To arouse students' interest in energy issues and contribute to practical energy education by producing the kinds of videotape that meet the greatest needs for supplementary teaching materials for energy education

**2. Contents:**

**4) "Amusing Quizes on Energy"**

This educational video introduces nuclear power generation and other general information on energy through amusing quizes presented and answered by Mr. Kent Delicatte, a TV personality, and a stuffed figure. The video is relatively easy to understand with a touch of amusement.

(Designed for elementary pupils, 20 minutes, VHS)

**5) "Energy Q&A with 'Mach'"**

Designed for children in high grades of elementary school, this video offers knowledge of energy in a manner easy to understand and in the form of a talk show program joined by Ms. Fumiake Mach, a TV personality, and an elementary schoolchild by supplementing their conversation and questions and answers with the projection of explanations and reference materials.

(Designed for pupils in high grades of elementary school, 20 minutes, VHS)

**6) "The Earth Is Our Treasure"**

This is an educational video for junior high school students, in which a couple of male and female junior high school students, the main characters, study and learn about the whole field of energy by looking back on the years after the birth of the earth to find that our life and industry depend on energy.

(Designed for junior high school students, 25 minutes, VHS)

**7) "Nuclear Power and Electric Energy"**

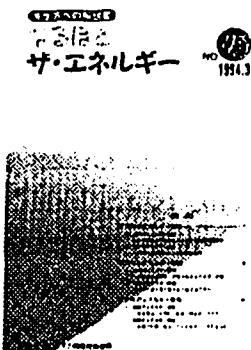
By citing a nuclear power station actually in operation as an example, this educational video explains the system of generating electricity. To make the explanations easy for junior high school students to understand, photos taken inside the power station, animated figures, etc. are introduced. Also included are topics that facilitate their discussion and study of energy and nuclear power generation.

(Designed for junior high school students, 11 minutes, VHS)

**3. Target: Elementary, junior and senior high school students**

## (2) Wall Newspaper for Elementary School

### 1) "Indeed! It's the Energy"



1. Purpose: To stir up the interest of children, on whom the next generation energy/nuclear energy issues are to depend, and promote an accurate understanding of such issues
2. Contents: Using many illustrations and data that are easy to understand, interesting themes are taken up for explanation to get pupils in high grades of elementary school to acquire an accurate understanding of energy/nuclear energy. A brochure containing data and information related to the themes is attached to this wall newspaper with the aim of helping teachers understand more deeply.
  - \* A red signal is lit for greenary. Forests are in danger.
  - \* Both "Noodle with tempura" and "energy" are imported?
  - \* Mankind is an inventor of energy.
  - \* How to generate "heat"
  - \* Let's think about our energy.etc.
3. Target: Elementary school pupils in high grades; teachers of science and social studies
4. Specifications: One-page fully-colored wall newspaper for each theme of B2 size, published five times a year

**(4) Supplementary Books for Education [the following Nos. 2-1) and 2-2)]**

**1. Purpose:** To contribute to the implementation of energy education at school by publishing, in consideration of the actual situation of and needs from education sector, supplementary books for practical energy education that can be used at classes of social studies, science, etc.

**2. Contents:**

**1) "Energy Handbook"**

(a) "Let's Think All Together About Our Energy" (For pupils in high grades of elementary school)

Composed of 52 pages of B5 size

(b) "Past, Present and Future of Energy" (For junior high school students)

Composed of 63 pages of B5 size

(c) "Energy·KinKonKan" (For senior high school students)

Composed of 72 pages of B5 size

**2) "Energy Why & What"**

In the Q&A formula, various questions about energy used for people's daily life are answered with explanations. Also introduced are quizzes about figures and simple experiments anyone can conduct.

Composed of 48 pages of B5 size

**3. Target: Elementary, junior and senior high school students**