JAEC's initiative to encourage public understanding in Japan

Hideo Kawabuchi

Secretariat of the Japan Atomic Energy Commission
Cabinet Office, Government of Japan
As a consequence of the TEPCO's Fukushima nuclear accident, distrust of and anxiety about nuclear energy have been growing.

The G7 Ise-Shima Leaders' Declaration states “it is also crucially important to engage the public in science-based dialogue and transparency to inform policymaking”.

Stakeholder Involvement – Public opinion toward nuclear –

**Do you support restart of NPP?**

- Yes: 29%
- No: 57%
- Others: 14%

**How should NPPs be in the future?**

- Stop immediately: 14%
- Stop in the near future: 59%
- Don't stop: 22%
- Others: 5%

Leadership of the Japanese government in utilization of nuclear power was too strong for relevant organizations, so that faithfully followed the government policies in their information disclosure.

Such information often advocated merits and safety of nuclear energy at a superficial level and lacked convincing explanations based on scientific basis and objective facts.

Eventually credibility for information made by a government severely decrease.

Not only plant neighbors but also general public nationwide became more anxious and concerned about nuclear energy.
Approach for increasing public understanding (1)

**Goal**

- It is important to increase general public's understanding of nuclear energy as well as plant neighbors'.
- By building an environment that any person could deeply understand nuclear information based on scientific basis and objective facts including uncertainty and risk, relevant organizations and government need to help him to reasonably judge future policy.

**Approaches**

1. Promoting public relations such as media and interactive dialogue
2. Building “knowledge-based Information network” by internet, which helps people search and trace a certain information according to their interests by themselves
Public opinion survey on utilization of nuclear power shows that
- **daily information sources about nuclear power and energy:**
  1. TV (news), 2. newspaper, 3. TV (information programs)
- **ways of collecting information:**
  1. search by internet, 2. subscription to newspaper, 3. watching TV

### Daily information sources about nuclear power and energy

- **TV (news):** 85.8%
- **newspaper:** 55.3%
- **TV (information programs):** 40.6%
- **news apps:** 19.9%
- **conversation with family members, friends and acquaintances:** 17.0%

### Ways of collecting information

- **search by internet:** 57.1%
- **subscription to newspaper (over 15 min):** 34.0%
- **watching TV (over 3 h):** 32.5%
- **a leaflet in a paper:** 26.5%
- **internet by cell-phone, smartphone and tablet:** 19.4%

Source: the FY 2015 public opinion survey on utilization of nuclear power (Japan Atomic Energy Relations Organization)
Approach for increasing public understanding (3)

Concept Image

Information hierarchy

Simple and easy-to-follow general information

Layer 1 (Information for general public)

Explanation for general of scientific basis

Layer 2 (Bridging information)

Reports and training materials

Layer 3 (Information for expert)

Research result, scientific report

Layer 4 (Scientific basis and objective facts)

Knowledge-based Information network

Promoting public relations

Increasing public understanding of nuclear energy

Public people

Communicator, relative organizations, government

Specialists

Feedback

Access

Media

Japan's approach of knowledge-based Information network does not sufficiently work.
Issues existing in knowledge-based Information network in Japan

- Difficult for public to easily find out the information they want and deeply understand it.
- Three major problems:
  - Relative information is scattered and has little relation between them
  - Explanations for general public of scientific basis and objective facts lack in many cases (Layer 2)
  - Retrieval function of internet is not user friendly

Reliability to information sender about energy and nuclear energy

<table>
<thead>
<tr>
<th>Information Sender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialists (academics, researchers)</td>
<td>47.4%</td>
</tr>
<tr>
<td>International organizations (such as IAEA and OECD)</td>
<td>22.9%</td>
</tr>
<tr>
<td>Critics (including casters)</td>
<td>18.1%</td>
</tr>
<tr>
<td>Relative organizations in nuclear energy (electric power companies, manufacturer)</td>
<td>16.9%</td>
</tr>
<tr>
<td>Government officials</td>
<td>7.8%</td>
</tr>
</tbody>
</table>

Source: the FY 2015 public opinion survey on utilization of nuclear power (Japan Atomic Energy Relations Organization)
Example in other countries

- In U.S.A. and United Kingdom, government, relevant organizations and international organizations offer information based on scientific basis and its explanation for general.
- It is easy to trace information because they connect each together in a cross-sectoral manner and have retrieval function of internet.

A example of offering information on NEI web site

Source: https://www.nei.org/
Improvement of nuclear knowledge base - JAEC's initiative -

- JAEC along with relevant organizations are planning to
  - connect together scattering information based on scientific basis and objective facts,
  - offer explanations for general public of scientific basis and objective facts,
  - considering uncertainty and risk,
  - improving retrieval function of internet.

Layer 1 (Information for general public)
- simple and easy-to-follow general information

Layer 2 (Bridging information)
- explanation for general of scientific basis

Layer 3 (Information for expert)
- reports and training materials

Layer 4 (scientific basis and objective facts)
- research result, scientific report

We are starting in the following field;
- environment • economic efficiency • energy security
- safety • accident prevention
- radioactive waste
- risk from radiation exposure

10 relevant organizations
- The Federation of Electric Power Companies (FEPC)
- Japan Atomic Energy Agency (JAEA)
- The Institute of Energy Economics, Japan (IEEJ)
- Japan Atomic Energy Relations Organization (JAERO)
- Japan Atomic Industrial Forum Inc (JAIF)
- The Japan Electrical Manufacturers Association (JEMA)
- Research Organization for Information Science and Technology (RIST)
- Atomic Energy Society of Japan (AESJ)
- Nuclear Waste Management Organization of Japan (NUMO)
- National Institute of Radiological Sciences (NIRS)
Thank you for your attention