

Country Report of KOREA
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Public Nuclear Information Activities in Korea in 2002-2003

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1. Basis of Nuclear Programs

The fundamental of nuclear activities in Korea is the 'Atomic Energy Law' enacted in March 1958. Korea's nuclear policy has been established subject to the Law. The Law has been amended several times in compliance with the changing society. In 1994, the need to formulate an 'Integrated Nuclear Promotion Plan' every five-year was mandated to the Law. Recommendations by the Plan are greatly encouraged to reflect to the nation's nuclear policy when renovating. In early 1990s, Korea began to recognize the utmost need to strengthen nuclear public information programs. At the time, Korea practically experienced severe opposition by the population to the nation's nuclear power program, particularly in connection with the radioactive waste management plan. Of course, when formulating the Plan, it was basically requested to draw up major road map for the nation's nuclear programs with special emphasis on nuclear power programs, it also requested to develop public information policy.

2. Integrated Nuclear Promotion Plan

The nation's first 'Integrated Nuclear Promotion Plan' was formulated in 1997. Many recommendations on nuclear public information were made. The second such Plan was formulated in 2001 in order to roll over the first Plan. The Atomic Energy Commission (AEC) adopted the Plan and requested government ministries to reflect the recommendations by the Plan when amending the 'Atomic Energy Law' and also when revisiting the nuclear policy.

The new 'Integrated Nuclear Promotion Plan' particularly underlined the importance of

obtaining public's acceptance when carrying out the nation's nuclear program.

3. Need to strengthen Public Information Programs

The main purpose behind the recommendations was to lead the nation's nuclear program successfully without significant oppositions. The Plan basically stressed the necessity of strengthening nationwide nuclear information programs so that the public could support the need to construct and operate nuclear power plants. It is certain that without the public's support, additional sites for construction of subsequent nuclear power plants and for permanent disposal of radioactive wastes cannot be secured.

4. Basic Philosophy of Public Information Policy

The basic philosophy of Korea's nuclear public information policy lies on 'Nuclear Programs together with the Public'. This is regarded as a golden rule. At the same time, it was strongly recommended that the government and the nuclear industry should be open and transparent in the nuclear decision-making process and participation of the public in the process should be encouraged. The Plan reminded that these approaches would be the salient points to obtaining public's acceptance successfully. At the same time, the Plan recommended the 'Community Support Program' should be continued.

The Plan also reiterated the importance of the 'Right to Know' of the public. It reminded the Government having unlimited responsibility to compensate the possible psychological burdens that the local population would have. Therefore, community support programs were emphasized.

5. Together with the Public

A lot of 'to do list' were recommended to facilitate the 'Together with the Public' spirit. Most of them were in fact ditto with the past action plans but some others were quite new ideas. Maintaining a friendly relationship with the media is one of the classical recipes.

Basically, it was recommended that the classical and traditional public information approaches would not be avoided because they would be still effective. The programs include publication, presentation, lecture, seminar, workshop, media program,

advertisement, wayside campaign, opinion-survey, visit to nuclear facilities, exhibition, and so on. When carrying out these programs it was suggested proper messages should be developed for proper target groups. Same message both to college professors and to housewives cannot work.

Another recommendation was to highlight the annual 'Nuclear Safety Day' as an event to refresh the public awareness about the everyday use of nuclear energy. In Korea, from 7 years ago, one day in September (normally in the first week) has been appointed as the 'Nuclear Safety Day'. The day intended to commemorate the promulgation day of the 'Atomic Energy Law' in 1958. Wayside campaigns (distributing information sheets to people on the street, occasionally with participation of VIPs, such as government high dignitaries, emeritus scholars, renowned religious leaders, and social leaders), speech-contest for high school students, and open house of nuclear installations were popular menu. At the commemoration ceremony, the Prime Minister of Korea has usually been featured. This participation was a demonstration of the government to support the nation's nuclear program.

4. Open and Transparency

Proper and immediate release of nuclear information to the public including the media was highly recommended. A mechanism to release real-time information by nuclear power plant operators was strongly recommended to develop. This is particularly so with regard to the monitoring of environmental radiation nearby the nuclear power plants. It was recommended that the monitoring data should be provided to the public on a real-time basis. In the past, the environmental radiation monitoring and the release of the survey result were not on a real-time basis. Whether the local population really require to know the environmental radiation monitoring data or not, the government recognizes that it is their responsibility to provide a real-time monitoring data to the public. It was hoped that this information release could ease the public's concern over environmental radiation thus to promote understanding about nuclear energy.

Another important recommendation was to operate a 'Local Radiation Monitoring Team' together with concerned citizens' groups. Participation of citizens' groups, particularly from the local community, on the issues regarding the operation of nuclear power plants has been regarded as an important step to promote the public acceptance. It was hoped that this team would contribute to establish a more trustful relationship

among the government, the nuclear industry and the local communities.

It is noted that some programs worked out successfully but some did not. Lessons learned from the not-successful programs would be reflected when modifying the next 'Integrated Nuclear Promotion Plan'. However, there has been a growing recognition among the nuclear industry that the nuclear issues are no more a technical matter but embraces completely socio-political factors. The nuclear community should sincerely consider societal and political issues when dealing with the public information programs.

4. Activities of KNEF

'A closer walk to the public!' Bearing this in mind, the Korea Nuclear Energy Foundation (KNEF, formerly OKAEA) was established in 1992 to function as a dedicated organization for nuclear public information in Korea. It was right after the nation's first and massive opposition to the site selection for radioactive waste management. Currently, five major programs are carried out by KNEF.

1) Media programs: Contributing articles, reader's corner columns, special editions to the media; TV and radio feature programs; press releases and press interviews; awareness increasing programs for the media professionals; analysis of news reports and counter-measures whenever necessary, and so on.

2) Publication programs: Monthly 'Atomic Culture', booklets and pamphlets for various target groups including the professionals, teaching materials, etc.

3) Advertisement programs: Advertising through mass media such as TV, radio, newspapers, magazines; fliers, bulletins, advertisement for mass transportations such as bus, subway, train and also at the stations; large scale billboard advertisement, various campaigns, etc.

4) Cyber programs: Operating Internet homepage with bulletin board, flash boards, quiz corners, premium gift corners; producing video programs and CD-Roms, publication of Web-magazine, etc.

5) Exhibition programs: Operating energy pavilion/booths at science parks and science museums, operating mobile exhibition vehicles, etc.

Budget for KNEF is supported from the utility company (KHNP) as a small part of its community support programs. The utility company has created community support fund annually since 1990. At present, it is some 0.8% from total electricity sales. KNEF has at present approximately 40 staff members.

6. Information Programs by Nuclear Power Stations

In Korea, at present, there are a total of 18 nuclear power plants in operation while 6 more units are under active construction. In addition, it is planned to have 10 more units before 2015, thus making a total of 34 units by that time. At present, Korea's nuclear power plants are accommodated at 4 different sites. They are Kori, Wolsong, Ulchin and Young-gwang.

Each station operates Visitor's Center. Not so fascinating. But, they are quite popular among the population, particularly among the students. Various public information programs are being carried out by the Visitor's Centers. However, another facet of public information activities by the utility company (KHNP) through nuclear power stations is the 'Community Support Programs'. Maintaining a very friendly relationship with the local communities nearby the nuclear power stations is regarded as one important vehicle for nuclear public information.

Four major outstanding projects are being carried out under the umbrella of the 'Community Support Programs'. They are 1) income increasing program 2) public works 3) educational program, and 4) information program. Necessary budget for the programs entirely comes from the 'Community Support Fund' that is being created from total electricity sales.

1) Income increasing program: Support income increasing of farmers and fishers of the communities, i.e., construction of community agro-fishery factories, markets, agricultural roads, piers, fish farms, animal farms, green-houses for economic plants, etc.

2) Public works: Construction of community centers, sports complex, medical facilities, recreation centers, water supply facilities, sewage treatment facilities, etc.

3) Educational program: Provide scholarships to the students, educational equipment

such as computers, support school libraries, sport teams, athletic meets, school catering service, etc.

4) Information program: Support community events such as town festivals, gala concerts, arts exhibitions, preservation of historic and cultural heritages, publication of local newsletters, and arrange visiting programs to nuclear power plants, etc.

The total amount of the fund for community support programs per year is approximately 50 million USD. The amount of the fund will increase annually because the number of nuclear power plants in operation will be increased.

7. NETEC and Waste Information

The NETEC (Nuclear Environment Technology Institute) was given mandate to manage the nation's radioactive waste mainly generated from nuclear power plants. The radioactive waste from nuclear power plants accounts for over 90%.

Selection of a permanent disposal site for radioactive waste in Korea has been a long wish. Virtually, it began from 1990. Before that time, in fact, the government and nuclear community did not give much attention to the site selection because they did not fully recognize the urgent necessity in early years of Korea's nuclear power program. They also did not expect such oppositions by local population and anti-nuclear environmental groups when the candidate site was announced.

Back to 1990, the government planned to have a site at An-myun Island in the western coast of Korean peninsula. The plan ended in failure. Opposition by local population abetted by anti-nuclear environmental groups, both domestic and imported, led the plan to vein.

After the first failure, the government and nuclear industry have spooned several other sites, but always refused. There are hundreds of different reasons why failed. There are also hundreds of lessons learned from the failures. But, one thing is clear. Without the government's strong will and without full support from the local population including their leaders, e.g., the elected politicians (congressmen who only concern about the votes), no plan can hit the road even though it is technically and financially well paved.

After ten more years from the painful experience, in early 2003 the government and the NETEC challenged again to select a site in a great hope that this time it would be successful. In March, the government (MOCIE) announced that they would launch the waste management project together with the construction of a Proton Accelerator at the same site in order to attract voluntary application of the site. Construction of a High Power Proton Accelerator is a 100 million dollars project. Accommodation of such a huge national project to the waste management site would provide great benefit to the community. It is noted that the community where waste management facility will be housed will benefit approximately 300 million dollars financial support according to the 'Community Support Law'.

In July 2003, the Buan County in southwestern coast of Korean peninsula formally volunteered to invite the site at its Wee-do Island. The Buan County Governor led the voluntary application. He had a firm belief that the whole Country (including the Wee-do Island) would greatly be developed when accommodating the two national projects. Everybody in the Island greatly was happy. The Government welcomed the proposal and announced the Island as the site. Environmental and geological surveys showed no problem.

However, right after the government's announcement, oppositions erupted. As a normal practice, oppositions were expected. But, it was not a normal practice. It was a huge and extremely militant opposition. It seemed that the whole population of the County composed a coalition to oppose the government's decision. Neighboring communities joined in the opposition. Anti-nuclear groups were rejoicing and jubilating. The government and nuclear industry (in this case, the KHNP and NETEC) absolutely could not make any progress. The government is simply silent at the moment as if they have completely no responsibility, no capability and no possibility. This is the current situation.

The government and the nuclear industry have been making every possible public information endeavors notwithstanding the prevailed oppositions but the opposition never ends. Some of the highlights of the information activities in addition to the traditional programs were;

- Individual direct communication program with one million target people: NETEC and KHNP employees were encouraged to make telephone calls, emails, personal letters or

personal meetings with one million target people, particularly with those living at the candidate site or neighbor communities. In July 2003 total 1 million 64 thousands target people were communicated. Messages were about necessity, safety and community development.

- Presentation touring by the Government officials and nuclear industry managers at the candidate and surrounding communities, mainly for opinion leaders such as local government council members, religious leaders, citizens' groups, and so on.

- Supporting Meetings by Women's Group Association: Women's Group leaders of the Cholla Province in which the candidate site belongs had waste management supporting meetings and adopted resolutions. Main message of the resolution was the safety of the waste disposal facilities in other countries proved safe enough, opposition of the nuclear power is like a dream that has no reality.

Anyway, it is a long way to go. More orchestrated effort among the Government, the nuclear industry, the environment concerned groups, the local population, and the media is needed. Most of all, demonstration of the Government's firm intention to implement the site selection project is utmost important.

8. Radiation Technology, Good for Promoting Public Understanding

Landmark construction of the Korea Radiation Applications Research Center of KAERI began in 2003 notwithstanding oppositions to the nation's waste management program. The groundbreaking ceremony of the Center was officially held on 18 June 2003 at Jeong-Eup city, about 200 km southwest from Seoul and only 50 km from Daejeon. The Prime Minister Koh of the Korean Government stated at the ceremony that the Korean Government would greatly encourage radiation technology research and development and the construction of the Center would be a stepping-stone.

The new Center will equip with 2 Gamma Irradiators (1 million curie and 100,000 curie, respectively), an Electron Beam Accelerator (10 MeV), an Ion Beam Irradiation Facility (300 KeV), an RI Production Cyclotron (30 MeV), a Gamma Greenhouse, and other necessary research facilities. Main research function the Center will be focused on to further identify and verify the characteristics of radiation and also research on radiation effect to the materials. The Center will actively carry out cooperation with end-users.

The Center when completed (end of 2005) will be one of the largest and modern installations in the region entirely dedicated to the Radiation Technology (RT) research and development for practical applications. The Center further aims to become a hub as the nation's RT think tank that will eventually play a catalytic role to develop advanced technology through active linkage with NT, BT, ET and other state-of-the-arts technologies. To this regard, it is expected that the Center when functioning will also contribute to the regional need. The Center will exclusively be used as a good tool for promoting better understanding about nuclear energy to the public.

9. Women are Better Speakers

Women's role in nuclear public information is more important than ever. Women can speak better than men to the public, particularly to other women. In Korea, women's activities for nuclear public information are gaining wide recognition. There are two significant nuclear related women's organizations. One is the WIIN, Women Interested In Nuclear. It was established in 1995 and now embraces 17 local chapters with almost 10,000 members throughout the country. Various nuclear public information activities are being carried out. The other group is Women In Nuclear (WIN)-Korea. It is one of the national organizations of Women In Nuclear. WIN consists of nuclear professionals working directly at nuclear related organizations. At present, WIN has about 120 members. The existence of these groups itself demonstrates that nuclear industry is not alone.

10. About FNCA Public Information Project

FNCA Member Countries have witnessed the change of Nuclear Public Information project from traditional pattern of holding seminars to encourage and support national nuclear public information programs. Such change is valuable. FNCA has supported national public information events during past several years. It is a successful and worthwhile.

FNCA's information circulation through Atoms in Japan widely welcomed. Korea receives Atomic in Japan from ACC, JAIF regularly and it is re-circulated to the nation's major nuclear related organization. MOST, MOCIE, KAIF, KINS, KHNP, NETEC, KNFC, KOPEC and KAERI enjoy the booklet.

AsiaNNet is not so active as supposed. Perhaps, one of the reasons not actively engaged in the AsiaNNet would be that now a lot of people could freely access almost all information on a real time basis through Internet.

Regarding the joint opinion-survey for high school students on the use of radiation in our daily life (done in July-August 2002), the results have not yet been used in Korea. Because the results were fairly similar with those have been surveyed in the past. The survey showed that the students had more interest in entertainment business or other fashion activities rather than deeply thinking about the use of nuclear energy. They recognized the need of electricity to turn the motors of the manufacturing plants and to supply power to their computers. They understand that nuclear power has been playing a significant role to supply the electricity. But, they expressed reservation to the nation's nuclear power program. Meanwhile, a lot of students understood the benefits that the radiation would give. However, they were also afraid of being contacted with the radiation. Such perception has not been improved. Perhaps, if we have another similar survey, the results would be ditto.

11. Some Suggestions for Future FNCA Public Information Activities

Operation of 'Speaker's Bureau' within FNCA framework will be a very needed activity for the member countries. To support member country's national public information event will exhibit solidarity among FNCA member countries. This will also demonstrate the strong support by FNCA to a country's public information endeavor.

Operation of FNCA Internet homepage is a must. A small task force within FNCA is required to set up to study the overall operation and management of FNCA homepage. Basically, the homepage should attract more visitors. The task force is hoped to develop strategies how to attract more visitors and what information should be posted.

Role of project leaders of FNCA public information should not only be limited to the project programs. The project leaders should also contribute to increase FNCA profiles to the public at large. This include the media, government ministries, influential politicians, academic circles, consumer groups, citizens' concerned groups, students, religious leaders, women's groups, industry, and so on. The public information project leaders should contribute to increase visibility of FNCA.

Nuclear related organizations in Korea

KAERI: (Korea Atomic Energy Research Institute) www.kaeri.re.kr
MOST: (Ministry of Science and Technology) www.most.go.kr
MOCIE: (Ministry of Commerce, Industry and Energy) www.mocie.go.kr
KNEF: (Korea Nuclear Energy Foundation) www.knef.or.kr
KHNP: (Korea Hydro and Nuclear Power Company) www.khnp.co.kr
NETEC: (KHNP Nuclear Environment Technology Institute) www.knetec.com
KNFC: (KEPCO Nuclear Fuel Company, Ltd) www.knfc.co.kr
KAIF: (Korea Atomic Industrial Forum) www.kaif.or.kr
WIN-Korea (Women In Nuclear-Korea) www.winkorea.or.kr
WIIN (Women Interested In Nuclear) www.wiin.or.kr

Some Anti-nuclear Groups in Korea

KFEM (Korea Federation of Environmental Movement): www.kfem.or.kr
KFEM/Anti-nuke Group: www.kfem.or.kr/antinuke
CEA (Center for Energy Alternatives): www.energyvision.org
KSAM (Korean Solidarity for Anti-nuclear Movement) www.antinuke.org
GKU (Green Korea United): www.greenkorea.org
Solidarity of Concerned Citizens for Energy: www.enet.or.kr
NGO Times: www.ngotimes.net
Boo-Ahn Citizens' Committee for Eliminating Radioactive Waste Disposal Facility and Nuclear Power Plants: www.nonukebuan.org
And so on.