THURSDAY, MARCH 25, 2004

CLOSING PLENARY

SUMMARY REMARKS

YASUMASA TANAKA, PUBLIC INFORMATION

Thank you, Madame Chair, for your very thoughtful introduction.

I was asked to summarize the outcome of the three Special Panel Sessions on Public Information and Outreach, on behalf of the Working Group on Public Information and Outreach of the Pacific Nuclear Council (PNC). I have the pleasure of serving as Co-chair of this working group.

Following the 13th Pacific Basin Nuclear Conference held in 2002 in Shenzheng, China, the three Special Panels were first proposed by the Pacific Nuclear Council and they were subsequently included in the International Technical Program of the 14 th Pacific Basin Nuclear Conference (PBNC).

At this point, it seems quite appropriate for me to mention in particular Gail Marcus <THMarcus@aol.com>, General Co-chair of the 14 th PBNC, Alan Levin <AEL@nrc.gov>, Co-chair of the PBNC's International Technical Program Committee, Yoshiaki Oka <oka@utnl.jp>, Japanese Representative on the PBNC 's International Technical Program Committee, Ann Bisconti <ann@bisconti.com> and Scott Peterson <jsp@nei.org>, Co-organizers of the Three Special Panel Sessions, without whose support and assistance these Special Sessions would never have been made possible.

A total of 15 papers were presented in the course of the 14 th PBNC. These papers represented a surprisingly wide range and large scope of problems associated with nuclear communications generally. It could have been more informative and stimulating if two more papers had been presented as had originally been scheduled, one dealing with Chinese public opinion regarding use of nuclear power, and another introducing the way in which public outreach activities are uniquely carried out by EDF (Electricite de France). Some complicated visa problems prevented the two speakers from coming to Hawaii from China and France.

On Tuesday, March 23, we had "Public Information and Outreach-I: The Theory and Methods of Nuclear Communication." The purpose of this session was to give the audience the theory and methods of nuclear communication. Yasumasa Tanaka and Scott Peterson co-chaired this session. Douglas Rosinski <douglas.rosinski@shawpittman.com> presented an interesting paper which showed that the economic and environmental concerns were primary incentives for introduction of a small nuclear reactor (4S Liquid Metal Reactor) in desolate developing areas. He also pointed out that giving correct and plain information is more important than promotional activities. Yasumasa Tanaka <yasumasa.tanaka@gakushuin ,ac.jp> presented a general model of communication and stressed a need to develop a rational communication strategy. On the basis of seven FNCA (the Forum for Nuclear Cooperation in Asia) member-nation study, Tanaka showed that the sender must consider the message and the channel factors to maximize the effect on the audience. He pointed out, among other things, that comic books and cartoons could be a good communication media to convey the science-

technology-related message to high-school students in some countries including Japan. In some countries, peer groups provide good opportunities for high-school students to exchange information and ideas regarding science and technology. Masaaki Mizuno <m-mizuno@g-nsc.co.jp> described in detail a communication strategy adopted by a Japanese electric power company and reported the effectiveness of traditional mode of communication, a person-to-person and mouth-to-mouth communication, especially in nuclear localities. Speaking about the lay people in these localities, he explained that emotionality is generally more prevalent than logics. Mike Meier <mdmeier@stpegs.com> and Ed Halpin <edhalpin@stpegs.com> presented an interesting case of the South Texas Project developed from the occurrence of unexpected anomaly of a nuclear reactor. They illustrated an organizational model of emergency (crisis) communication ,. The model takes into account a scheme of scheduled communication with basic stakeholders, such as NRC, the Owner, and the Employees, when emergency occurs. Lastly, Scott Peterson <jsp@nei.org> gave a very interesting paper which he co-authored with Ann Bisconti. The authors pointed out, among other things, the importance of use of focus groups, such as law-makers and opinion leaders, in nuclear communications. They also demonstrated that the styles of communication affect the effects, exemplifying that "clean-air energy" gives a simpler and easier image than "emission-free energy."

Each paper made a significant contribution to improve nuclear communication, by introducing a new dimension of application of the theory and methods of communication in the nuclear domain. Despite differences in language and socio-politico-economic culture, there appear to be more cross-culturally common principles operating in the nuclear communication than linguistic and cultural uniqueness.

On Wednesday, March 24, we had "Public Information and Outreach-II: How to Communicate with the Public." This session was intended to introduce to the audience a variety of communication styles and media, ranging from an interpersonal, mouth-to-mouth communication through mass media to new electronic media. Claudia Lemieux and Kaori Takada co-chaired this session. Kaori Takada 's <takada@fepc.or.jp> presentation described the importance of outreaching the female segment of population. Women generally are more afraid of nuclear energy than are men because they are concerned with the effect of radiation upon babies and children in case of nuclear accident. She argued that communicating with women should be bi-directional and such bi-directional communication is most effective in small-group situations. She pictured the activities of a couple of local women 's groups in Japan, which facilitate person-to-person dialogues regarding various topics related to nuclear matters. She emphasized the effectiveness of grass-root communication in the nuclear domain. Sharon Kerrick's <skerrick@ans.org> paper was read by Michael Diekman. The paper gave an overview of American Nuclear Society as an excellent facilitator of information outreach. ANS facilitates communication with professionals in non-nuclear areas, such as medicine, food technology and agriculture. ANS uses specific messages to policy makers, educators, students, and the public. Tsutomu Hayashi <hayashi-tsutomu@mwe.biglobe.ne.jp> reported the volunteer activities of a group of retired nuclear engineers and nuclear scientists in Japan. These retired nuclear engineers and nuclear scientists organize a Speakers Bureau and talk to the interested audience upon request. They write to the printed media and meet the media people to resolve any misunderstanding and correct unfair treatment of nuclear power by giving the mass media accurate and objective information. The group maintains a Web Site (http://www.engy-sqr.com) for information outreach and Q&A. Claudia Lemieux <lemieuxc@cna.ca> illustrated usefulness of the electronic media, a website, for reaching decision-makers and

opinion leaders in Canada. Key messages were developed to promote clean energy and clean electricity. It was also reported that, using a micro-web of the Canadian prestige paper, the Globe and Mail, the Canadian Nuclear Association maintains interesting pages, such as "Test Your Energy IQ" and "Energy Polls." In order to maintain and operate the Website, CAN hires its own Webmasters. It was unfortunate that Min Pan <min.pan@edf.fr> who was expected to present a paper on Public Outreach Activities of Nulcear Power Plants in France, was not able to come because of visa problem.

The second session thus successfully demonstrated a variety of communication madia and their uses, which would undoubtedly contribute to further research, development and applications regarding the communication media in the nuclear domain.

On Thursday, March 25, we had "Public Information and Outreach-III: Case Studies of Effective Communications." This session was intended to deal with the success (or the failure) of the effective communication regarding the font-end and back-end issues and the corporate culture. Scott Peterson and Chang Sun Kang co-chair the session. Janet Kotra <jpk@nrc.gov> described the evolution of NRC's outreach program on high-level nuclear waste. The agency's new guidelines for the Yucca-Mountain outreach activities were introduced. It was pointed out that NRC's interactions with the public are more encouraged at the present than in the past and the way in which NRC interacts with the public is being improved. Chang Sun Kang <cskang@snu.ac.kr> reported the past and present state of affairs regarding the nuclear waste management in Korea since it started in the 1980's as the national policy. Kang was not very optimistic about the future progress of nuclear waste management in Korea, first because of mounting public opposition which includes a number of politicians, and secondly because of apparent shortage of human and material resources by which information outreach is made possible. Kang suggested several new schemes for better public information outreach, such as "increase in two-way communication between government and the public", "transparency of information" and "fair consultation and participation" involving the public. Shin'ichi Yamasaki <saki@hq.jnc.go.jp> described the history of the development of two underground research laboratories for research and development regarding high-level nuclear waste disposal. He also touched upon the process of negotiation between the national and the local (prefectural) governments concerning the siting of a URL at Horonobe, Hokkaido. The case Yamasaki presented illustrated how insufficiency of communication and mutual understanding between the national and local (prefectural) governments brought about the delay of granting a permission to construct the URL for more than 10 years. It is now recognized, according to Yamasaki's paper, that some democratic process, such as "bottom-up decision-making", "openness of information", "consistency of what is said and what is done" and "respect of young people's voice", are prerequisite for reaching the public mind and building the consensus. Clarence Hardy's <cjhardy@ozemail.com.au> paper first described the status of uranium deposit and production in Australia in a world perspective and then observed uranium mining and environmental impact assessment in that country. The way in which the environmental protection issues in uranium mining were addressed in the vicinity of the Ranger uranium mines was reviewed and discussed. It was pointed out that despite claims that uranium mining degraded the nearby national park, it was proven by scientific investigations that this was not the case. Scott Peterson <jsp@nei.org> presented several characteristics unique to the NIMBY syndrome.

The NIMBY is prevalent in nuclear waste management facilities in the United States. Although there is no immediate remedy for the NIMBY, Peterson considered early public involvement and inclusion as necessary conditions for reaching agreement.

“Open dialogue”, he said, “brings about a win-win situation.” Hiroyuki Kuroda’s <kuroda.hiroyuki@tepco.co.jp> paper was read by Masataka Ambashi. Kuroda ’s paper clearly indicated how damaging secrecy and mishandling of information could become to an electric power company with respect to its prestige, image and finance. Because of what Kuroda called “Nuclear Power Scandal”, the electric power company had to shut down all its 17 nuclear power plants. The lessons were learned quickly, however. Kuroda’s paper made it clear that there had been significant improvement in the company’s institutional arrangements with the major stakeholders, such as the regulatory agencies, local governments and local people. Improvements include regular local meetings which facilitate public involvement and inclusion in the decision-making on nuclear safety and the confidence building. Internally, changes are also taking place in the company’s cooperate culture in order to recover the public trust which was once lost by the “Scandal”.

Throughout the three sessions, each presentation was followed by a very lively interaction. The interaction itself was informative as well as stimulating. The three PNC-originated Special Sessions have provided an excellent international forum for mutual learning and stimulation on nuclear communication, as was originally expected. Thanking again for all who have contributed to these three sessions, I would like to bring my summary to close.