

Transparency of Nuclear Regulatory Activities

Workshop Proceedings
Tokyo and Tokai-Mura, Japan
22-24 May 2007



Nuclear Regulation

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and the Japan Nuclear Energy Safety Organisation**

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FOREWORD

In the late 1990s the Committee on Nuclear Regulatory Activities (CNRA) of the OECD Nuclear Energy Agency (NEA) drew attention to the interface between regulatory authorities and the public as constituting a major challenge. The Committee concluded that in many countries the interaction between regulatory bodies and the public is quite different for a variety of reasons, and therefore sought to gain an understanding of the commonalities and differences, and to clarify the most appropriate conditions and practices for improving this interaction.

A first workshop on this interaction, entitled “Investing in Trust: Nuclear Regulators and the Public”, was held in Paris, France in 2000. It provided a unique opportunity to exchange experience of national practices regarding regulatory bodies’ relations with the public. It also showed that good governance and efficiency in decision making are increasingly dependant upon mutual trust and confidence between government authorities and the public. Based on the conclusions of this workshop, the CNRA decided to establish the Working Group on Public Communication of Nuclear Regulatory Organisations (WGPC), in order to maintain the exchange of information and experience.

In 2004, the CNRA organised a second workshop entitled “Building, Measuring and Improving Public Confidence in the Nuclear Regulator” in Ottawa, Canada. A general observation from the presentations and discussions was that cultural differences between the countries are large, and similar means for communication are not effective in all countries. It was also clear that in some countries the regulators can achieve public confidence more easily than in others. An important factor is the general trust of the government and its representatives. However, a number of common principles were also identified that can be recommended to all regulators.

In follow-up, the CNRA and its Working Group on Public Communication decided to organise a third workshop in Asia dedicated to the transparency of nuclear regulatory activities, thus completing a cycle of events addressing the interaction of regulators and the public. The integrated conclusions from the three workshops should provide regulatory authorities with the best practical approaches to perform this complex but critical responsibility.

The main purpose of the 2007 workshop was to provide the staff of nuclear regulatory organisations responsible for public communication with the opportunity to share information, practices and experiences, and to discuss progress and techniques in the area of nuclear regulatory communication with the public. Particular emphasis was placed on the transparency of nuclear regulatory activities.

The workshop on the “Transparency of Nuclear Regulatory Activities” was held on 22-23 May 2007 in Tokyo, Japan, with an optional session with local residents held on 24 May 2007 in Tokai-Mura. It was organised under NEA/CNRA auspices in collaboration with the Japan Nuclear and Industrial Safety Agency (NISA) and the Japan Nuclear Energy Safety Organisation (JNES). The workshop was chaired by Dr. Kazuo Sato, President of the Japan Nuclear Safety Research Association. Over 80 experts – from Canada, Finland, France, Germany, Hungary, Japan, Korea, the Netherlands, Norway, the Russian Federation, the Slovak Republic, Spain, Sweden, Switzerland, the United Kingdom and the United States – attended the workshop. The International Atomic Energy

Agency (IAEA) was also represented, as well as a wide range of Japanese stakeholders from the industry, local authorities, media representatives and non-profit organisations.

The workshop highlighted the considerable importance for regulatory organisations to develop transparent relations with the public and the media in carrying out their basic mission to protect the public. Workshop participants developed a common understanding of stakeholders' expectations regarding transparency in nuclear regulatory activities and identified a number of new practices for implementing and developing transparency in nuclear regulatory activities. They also shared experience of how the development of transparency does impact on the regulator. Overall, the workshop has contributed to the identification of important issues and lessons learnt in the area of nuclear regulatory organisations' communication with the public.

The optional interaction session, which attracted 40 participants, was held on the third day of the workshop and consisted of a trip to Tokai-Mura. Participants visited facilities of interest for public communication related to nuclear activities, and participated in a very open discussion session about communication practices with local residents.

The conclusions and recommendations of the workshop have been submitted to, and endorsed by, the CNRA. They will be followed up by the CNRA Working Group on Public Communication of Nuclear Regulatory Organisations (WGPC). The forthcoming activities of the WGPC will concentrate on capturing the main outcomes of the three workshops so as to build a roadmap for its future work.

Acknowledgements

We would like to express our thanks to the Organising Committee, the session chairmen and all those who contributed to the success of the workshop by presenting their work and taking active part in the discussion. Our gratitude goes to the Japan Nuclear and Industrial Safety Organisation (NISA) jointly with the Japan Nuclear Energy Safety Organisation (JNES) for hosting the meeting and for their kind hospitality. Special thanks are due to Ms. Mari Yano and to Mr. Satoshi Ito for taking care of the local arrangement, as well as to Mrs. Solange Quarneau and Mrs. Annette Meunier for their dedication in preparing these proceedings for publication. The NEA also wishes to express its gratitude to the Government of Japan for facilitating the production of this report.

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EXECUTIVE SUMMARY

1. GENERAL CONTEXT OF THE WORKSHOP

Sponsorship

The Workshop on Transparency of Nuclear Regulatory Activities was held from 22 to 24 May 2007, in Tokyo and Tokai-Mura, Japan under the auspices of the OECD Nuclear Energy Agency (NEA) Committee on Nuclear Regulatory Activities (CNRA) in collaboration with the Japan Nuclear and Industrial Safety Agency (NISA) and the Japan Nuclear Energy Safety Organisation (JNES). The workshop was chaired by Dr. Kazuo Sato, president of the Japan Nuclear Safety Research Association.

Workshop attendance

Over 80 experts attended the workshop. They came from Canada, Finland, France, Germany, Hungary, Japan, Korea, the Netherlands, Norway, Russian Federation, the Slovak Republic, Spain, Sweden, Switzerland, the United Kingdom and the United States. The IAEA was also represented, as well as stakeholders from Japan, Korea and the United States covering the industry, local authorities, media representatives and non-profit organisations.

Background

In the late 1990s the CNRA identified the interface between regulatory authorities and the public as a major challenge. The Committee concluded that in many countries the interaction between regulatory bodies and the public is quite different for a variety of reasons and it appeared useful to start working on understanding commonalities and differences and clarifying the most appropriate conditions and practices for improving this interaction.

A first workshop was held in Paris, in December 2000, which addressed the prerequisites for a nuclear regulator to develop and maintain the confidence of the public in its activities. The main outcomes of this workshop can be summarised as follows:

- public communication should be considered a key function;
- a necessary condition for being trustworthy is to be well-known;
- efficient communication channels are needed;
- good communications is information transfer both within and outside a nuclear regulatory organisation (NRO);
- information must be easily available to the public;
- public communication is a joint effort by all regulatory body staff members;
- lessons can be learnt from other fields;
- and finally lack of harmonisation between countries could destroy trust.

This latter observation was one of the main reasons for the CNRA creating the Working Group on Public Communication (WGPC).

The WGPC held a second workshop in Ottawa, in May 2004, which addressed the possible ways for building, measuring and improving public confidence in the regulator. Although it was found that cultural differences between the countries are large, and that similar means for communication are not effective everywhere, a number of common principles were identified that can be recommended to all regulators. Among these were the following:

- to give high priority to building and maintaining public confidence;
- to use any appropriate and available means to make the regulator well known;
- to issue news releases promptly and be out in front of the public whenever the need for information arises;
- to produce messages which are understandable by the target audience;
- to make experts available to answer the questions;
- to measure the confidence of stakeholders in the NROs;
- to stay out of energy policy debates and issues;
- and to be seen to be independent from the licensees and to be honest and transparent.

After the second workshop, the CNRA approved a proposal from the Working Group on Public Communication to organise a third workshop in Japan, in May 2007, dedicated to the transparency of nuclear regulatory activities.

Purpose of this workshop

The main purpose of the 2007 workshop was to provide the staff of nuclear regulatory organisations responsible for public communication with the opportunity to share information, practices and experiences, and to discuss developments, progress and techniques in the area of nuclear regulatory communication with the public. Particular emphasis was placed on the transparency of nuclear regulatory activities. The workshop included five topical sessions in Tokyo and an optional session based around discussions with local resident in Tokai-Mura. Major topics discussed included:

- understanding transparency in different cultural contexts, its relationship with trust, its importance for an NRO and its limitations;
- stakeholders' expectations regarding transparency (nuclear operators, media, local representatives, non governmental organisations – NGO);
- conditions to be implemented by governments and NRO for ensuring transparency;
- changing nuclear regulatory practices for ensuring transparency (several examples provided by various regulators);
- methods for evaluating the transparency of NROs.

The regional session, held on the third day of the workshop (24 May 2007) consisted of a trip to Tokai-Mura where participants visited some facilities of interest for public communication related to nuclear activities and participated in a discussion session about communication practices with local stakeholders.

Follow-up of this workshop

The conclusions and recommendations of the workshop have been submitted to and endorsed by the CNRA. They will be followed up by the CNRA/WGPC. The forthcoming activities of the WGPC will concentrate on capturing the main outcomes of the three workshops so as to build a roadmap for its future work.

2. MAIN FINDINGS FROM THE WORKSHOP

Session 1: Understanding transparency

The first session was devoted to clarifying the concept of transparency as used in the field of nuclear safety and regulation. It involved two senior nuclear regulators, from countries with and without power reactor programme and a journalist and it was moderated by a professor in social science. The following observations resulted from this session:

- Public confidence is the outcome of transparency, although transparency is not the only element of confidence.
- Transparency includes not only access to information (passive transparency) but also providing understanding of regulatory process (active transparency) to stakeholders. This requires effective interactions between public and NRO, between licensees and inspectors, between inspectors and regulatory management and between regulatory body and political decision makers.
- Transparency can increase public confidence and NRO credibility if regulators demonstrate certain attributes that provide an impression of well-informed professionalism, namely: competence of NRO staff, openness, accountability and good internal communications within the NRO.
- Regulator's transparency experiences limitations when it is not balanced by adequate industry transparency.
- Participation of stakeholders is essential: it cannot be just a one way flow of information and claims for a promotion of understanding "Risk Governance". It should be about true engagement and promotion of understanding.
- One should be aware of a side-effect of transparency; the possible misuse of information, which should not impede the regulator from responding to stakeholders expectations.

Session 2: Stakeholders' expectations

The second session was devoted to stakeholders' expectations. It involved a nuclear operator, a journalist and a mayor. The following observations came out from this session:

- In view of the level of the stakeholders' expectations it appeared that there is a need to allocate resources to address stakeholder involvement should be seen as an investment on the path to developing public confidence.
- NRO goals should include public confidence, in addition to safety supervision.
- NRO need to be perceived as a reliable and independent source of information in order to expect public confidence in a crisis situation. This can be achieved by various means:
 - regular reporting and public information on topics of public concern or NRO activities;
 - communicating with local and regional stakeholders and addressing their concerns with respect to the nuclear facility;
 - explaining in advance and being open about plans for new facilities and major modifications (e.g., MOX use) in order to provide the opportunity to gain trust.
- A journalist pointed out that if the NRO is not honest about the potential for mistakes and the uncertainties, the public will ask for "zero risk". The public would appreciate the NRO showing humility and being ready to acknowledge the uncertainties or accept different views.
- Lying, hiding information and falsifying results can lead to a loss in public confidence which can take a long time to reverse.

- It is essential to provide timely information and to use understandable language. Jargon and technical language creates mistrust. Some key pointers are:
 - vacuums will be filled fast by multiple sources of information;
 - ensure immediate access to media (a single event somewhere is affecting public perception everywhere);
 - the media viewpoint is that everything should be transparent, which ensures credibility and accountability;
 - prepare proceedings from meetings/hearings without delay;
 - train officials to speak language understood by the media/public.
- It is generally observed that there is a preference to trust individuals rather than organisations
 - trustworthy information is perceived to come from reliable people – quality of spokespersons influences the image of the organisation;
 - several spokespersons giving consistent messages could increase trustworthiness.
- Independence is an important issue – NRO must not be seen as “friends” of the nuclear industry. In addition, regulatory roles must be clearly separated from promotion (a potential issue when the NRO reports to the same agency that promotes nuclear energy or is doing R&D).
- The right to be heard is essential for the public; an exchange of views helps moderate and disperse conflict.

Session 3: Conditions for ensuring transparency

The third session was devoted to conditions within NRO for ensuring transparency. It involved several nuclear regulators. The following observations came out from this session:

- Freedom of Information Acts and related Regulations, which have developed over several decades, are necessary to ensure transparency:
 - public access to documents of interest (NRO, utility) to be facilitated;
 - attitude among regulatory management towards openness is equally important as formal rules on openness.
- It was noted that useful guidance on stakeholder involvement is available from international organisations (IAEA, NEA) and that it is important to become familiar with it (NEA workshops proceedings, IAEA: GSR-1, GS-G 1.1, INSAG 20).
- If internal transparency of NRO is improved this will make the organisation become more transparent externally. In that respect it may be useful to use survey of NRO staff satisfaction on internal communications to improve staff training policy as this is likely to effect external transparency.
- Educating journalists could make them more objective in seeking information and reporting on it:
 - training course and study trips supports journalists – create mutual understanding;
 - success depends on involving the media in course development;
 - training ultimately leads to increased awareness and understanding of the NRO and more accurate reporting of the NRO role.
- Public hearing process structured to improve public participation in NRO decision making process:
 - increased understanding of NRO decision making;
 - possibility of influencing the decisions;
 - more informed decision making – all views taken into account.

- Socio-economic difference between countries means that there can be no standard approach to transparency. However good practice should be understood and applied where applicable.
- The development by NRO of a “branding policy” was observed as a modern approach but which needed to be better understood.

Session 4: Practices for ensuring transparency

The fourth session was devoted to practices for ensuring transparency. It involved several nuclear regulators. The following observations came out from this session:

- The first question related to how much should a regulator communicate and how much should the utility communicate. The discussion highlighted the following:
 - Need well established communication, before an incident occurs, between the NRO and licensee and the NRO and the region/local authorities;
 - Need to initiate active communication on issues or events of potential concern before questions are asked by the media or other stakeholders;
 - It is observed that Regulator cannot communicate alone: it is imperative that utilities also communicate openly and where possible to coordinate communications:
 - utility should address the technical issues;
 - NRO should address the safety significance, the assessment of licensee performance and the regulatory actions (NRO must know also technical facts and be able to explain them when asked);
 - Public / media often have low confidence in utilities’ information:
 - this could be improved by openness by utility during normal operation;
 - utility could invite media to nuclear site to better understand the real situation.
- The best way to avoid loss of confidence is to disclose and investigate potential safety concerns in a proactive manner before they lead to concerns arising out of a lack of information;
 - report the start of investigation and its results to media – make report available;
 - avoid underestimation of risk in early stage – no firm statements before facts are known and evaluated.
- What if public confidence of NRO is lost during an event?
 - experience has shown that it is advisable to invite independent foreign organization or group, or a trustworthy national evaluator, to investigate NRO performance and to report the results in public;
 - announcing a self-assessment is useful as well.
- Crisis management may require the use of emergency preparedness processes and procedures so as to be able to effectively respond to communication demands; use INES to help public understanding of events.

Session 5: Methods for evaluating transparency

The fifth session was devoted to methods for evaluating transparency. It involved nuclear regulators and a NGO. This session has shown first that measuring transparency is difficult. It has also shown that it can nevertheless be done by different means and the following observations came out from this session:

- What gets measured and made public gets done and done well.

- Opinion surveys may be a help as feedback on public confidence and awareness of the regulator.
- However public opinion surveys have, like other means and like all quantitative tools, their limits and it may be questionable whether they do actually evaluate the transparency of the regulator.
- No single measure can evaluate transparency – multiple measures which are complementary are needed.
- Notoriety and transparency can be easily evaluated by looking at the web presence of your NROs.

Concluding session in Tokyo

The concluding session in Tokyo led to the observation being made that progress had been made in developing common international understanding of the main features of public communication of the nuclear regulators since the first WGPC workshop in 2000. At that time the main conclusion was that only a few very general common statements could be made since communication was highly dependant on national culture and local practices.

However, it has appeared that with time, and this may also be a consequence of the “media globalisation”, the public in many countries reacts more and more in similar ways to its information requirements from a nuclear regulator. The continuous exchange of practices amongst nuclear regulators has enhanced their capacity to better address the concern of the public by a greater understanding of their expectations. In that regard the topic of regulatory transparency has proved to be a useful working area since the approach can differ from one country to another due to different socio-economic conditions.

Regarding this topic of transparency it was observed that the more open a regulatory body is then the greater chance it has to gain the confidence of the public. In other words: “The more naked – the more trusted”. In order to be better trusted by the public and media, it is essential to provide information likely to be of interest before it is even asked for, and to be prepared to answer any question, by being open and disclosing knowledge within the bounds of security and commercial restrictions.

Optional session in Tokai-Mura: Exchange with local residents

The local session was devoted to exchange with Japanese local residents about practices for improving communication in nuclear safety of their neighbouring nuclear facilities. It involved nuclear regulators and members of local associations. It was observed that communication at this local level is a very important supplement to the official communication at the national level. It appeared that most of the lessons drawn from the Tokyo sessions at the national level regarding communication of the NRO with the public could be transposed at the local level in this particular situation. However this would imply also that this is considered as part of the mission of a local NRO administration where there is one in place and also that resources are allocated for this specific communication to the public. This implies also that effective and fast communications exist between the national and the local level of the regulatory organisation with regard to addressing stakeholder expectations.

OPENING SESSION

WELCOME ADDRESS

Dr. Kazuo Sato
President of NSRA, Japan

Good morning, ladies and gentlemen,

Now we start the workshop on the Transparency of Nuclear Regulatory Activities. This workshop is one of the activities of the working group on public communication of CNRA, OECD/NEA.

As introduced, I am Kazuo Sato, the general chairman of this workshop.

In the recent trend of so called “Nuclear Renaissance,” the necessity of transparency of nuclear safety regulation has become more enhanced than ever.

I also stress that this transparency to the public is also indispensable in the nuclear industry as well.

In such a general recent situation, it is indeed significant that the workshop of the WGPC has been organized to discuss this matter of transparency.

In this workshop, not only nuclear regulators for WGPC member countries but also municipal bodies, media, NGOs and other stakeholders join in to discuss the transparency of nuclear safety regulations and share the internationally newest knowledge and experience.

I expect that all participants will positively take part in the discussion and thus this workshop will be very much useful and successful.

I sincerely wish the three days of workshop including the session at Tokai-Mura will be of a great success.

Thank you very much.

THE MINISTER'S ADDRESS

Mr. Kozo Yamamoto
Deputy Minister of METI, Japan

Ladies and gentlemen,

It is my great honour to be here today and deliver a few words at the opening of the OECD/NEA/WGPC Workshop.

It gives me a great joy that the third Workshop has now opened here in Japan. I heartily welcome all of you who gathered here, as active and important players in public relations for nuclear power safety regulations around the world.

In Japan we have been promoting nuclear power for energy security and for efficient use of resources. While an energy policy is becoming more important than ever in reaction to drastic changes in the energy situation, both at home and abroad, Japan clearly regards nuclear power stations as a primary source of electric power.

To promote the uses of nuclear energy, ensuring safety is the fundamental precondition. The Ministry of Economy, Trade and Industry is constantly reviewing the contents of the nuclear safety regulations for rapid improvement, whenever the need arises. In this process, I believe that increased transparency is the key element. Improved transparency will allow us, as a regulatory agency, to fulfill our accountability to the public, to foster reliability and to receive valuable feedback about our activities from various stakeholders. Such feedback is most useful in reviewing and developing our regulatory measures. From this viewpoint, our Ministry is more actively engaging in public hearings and PR activities, with respect to nuclear safety regulations. In recent years, we have held meetings to converse with residents in areas close to nuclear power facilities and have engaged in other novel approaches. Because of misconduct by certain power plants, such as the falsification of data that was revealed last year, a general inspection of all electric power stations was ordered last November, under the minister's direction. Based on the results of this general inspection and means of preventing a recurrence, as reported by the respective plants, the Ministry of Economy, Trade and Industry has announced measures to be taken. These measures include the promotion of international disclosure and information exchange on accidents, problems and similar incidents. We are determined to do our best to improve transparency, not only of our regulatory activities, but of every activity concerning nuclear safety in general.

I presume that for the nations represented here, improving the transparency of their regulatory activities is an essential task, as it is in Japan, despite differences surrounding the issue of nuclear power. Therefore, I think the theme of this workshop, "*transparency of nuclear regulatory activities,*" is a well-timed indeed.

In order to promote the transparency of regulatory activities, the issue of how to define transparency, effective ways of putting it into practice and assessing the outcome should be discussed. Such discussion will require that the views and experiences of people in different positions, such as the press, people living near nuclear power facilities and others be comprehensively taken into account.

Therefore, it is beneficial for participating nations that are practicing and developing “*transparency of nuclear regulatory activities*”, to have interested parties with different backgrounds from various countries gathered here to exchange and share knowledge.

This workshop will surely contribute significantly to ensuring the safety of nuclear power by providing an opportunity to advance “*transparency of nuclear regulatory activities*” so that people throughout the world will have an interest in nuclear safety, and better understanding of, nuclear safety. That is why I attach high importance to this workshop.

Let me conclude by wishing for the success of this workshop in Japan. Thank you.

OPENING REMARKS

Mr. Luis Echávarri

Director-General, OECD Nuclear Energy Agency

Thank you President Sato for giving me the opportunity to speak at this important meeting. Mr. Vice Minister, Mr. Director General, ladies and gentlemen,

Let me start by thanking the Japanese Government, and more specifically the Ministry for Energy, Trade and Industry (METI) and the Nuclear and Industrial Safety Agency (NISA), for hosting this meeting and all the arrangements they have done to make it a successful event. The interesting programme has attracted more than 85 senior level participants from 16 countries and international organisations.

To begin, I would like to place this meeting into the more general perspective of the OECD. The OECD is an organisation dealing with the world economy and making recommendations on policy for member countries very concerned with the relationship between governments and the civil society, a complex relationship because of the variety of groups included in what is referred to as civil society. The OECD has clearly identified that for governments it is increasingly difficult to take decisions on policy, if they do not take well into account and they do not establish a dialogue with the civil society at large. So the problem of relating to the public that we are going to see in this workshop is not unique for the nuclear sector and is not unique for the safety regulators. Therefore, for the OECD, it is very important that we analyse how we can progress in having a better dialogue with the civil society in all the different aspects of government policy.

Let me now introduce the Nuclear Energy Agency. The OECD Nuclear Energy Agency (NEA) is composed of 28 countries, in Europe, North America and the Asian Pacific region, representing 85% of world's installed nuclear capacity. The NEA mission is to assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for the safe, environmentally friendly and economical use of nuclear energy for peaceful purposes.

To achieve this goal, the NEA operates as a forum for sharing information and experience and promoting international co-operation; as a centre of excellence which helps member countries to pool and maintain their technical expertise; and as a vehicle for facilitating policy analyses and developing consensus based on its technical work. In doing this we co-operate closely with the IAEA and the European Commission.

The NEA develops its activities through seven Standing Technical Committees, which are composed of high level experts from regulatory authorities and technical institutions from member countries. Regarding interactions with civil society the most involved committees are the Committee of Nuclear Regulatory Activities (CNRA), the Committee on Radiation Protection and Public Health

(CRPPH) and the Radioactive Waste Management Committee (RWMC). I will brief you about their activities in this field.

Let me start with the CNRA, the committee that is sponsoring this workshop. The CNRA is composed of high level regulators and is guiding NEA's programme regarding regulatory requirements, licensing and inspection of nuclear facilities, and public communication. Dr. Laaksonen, Chief regulator of the Finnish safety authority, is the current Chairman of CNRA and is here with us today.

The CNRA identified several years ago the interface between regulatory authorities and the public as a major challenge. The Committee concluded that in many countries the interaction between regulatory bodies and the public is quite different for a variety of reasons. Moreover, public involvement in decision making, varies widely from one country to another.

In November 2000, the CNRA sponsored a workshop entitled "Investing in Trust: Nuclear Regulators and the Public". Some of us were at that meeting, which attracted a large number of high-level participants from nuclear regulatory bodies and radiation protection agencies.

One of the main conclusions of that meeting was that public communication is a key function in all regulatory agencies and that all regulatory body staff members must feel responsible for public communication. But also the meeting concluded that differences of approach between countries in this subject undermine public trust.

There was consensus at the end of the Workshop and in the CNRA, that ways should be found to continue sharing information and experience in the field of public communication of nuclear regulatory organisations. The Committee decided to set up a Working Group on Public Communication of Regulatory Organisations.

The major challenges in the field of regulatory communication to the public are:

- meeting freedom of information requirements and the need in some countries to respond to all requests from the public and the media;
- responding to public demands for involvement in major decision-making;
- maintaining an appropriate balance between the need to inform the public and at the same time the need to encourage responsible media reporting of regulatory action; and
- responding to increasing pressure on regulatory body resources in some countries to accommodate public needs to participate in deliberations as well as the decision-making process.

In 2004, the CNRA organised a workshop on building, measuring and improving public confidence in the nuclear regulator. The meeting was hosted by the Canadian Nuclear Safety Commission, and participants included regulators, industry, local authorities, citizen groups and media.

A general observation from the presentations and discussions during that meeting, was that cultural differences between the countries are large, and similar means for communication are not effective in all countries.

It was also clear that in some countries the regulators can achieve public confidence more easily than in the others. An important factor is the general trust on the public government and its representatives.

However, a number of common principles were identified that can be recommended to all regulators. Among these are the following:

- Give high priority to building and maintaining the public confidence; confidence among all stakeholders is a necessary prerequisite for successful nuclear regulation.
- The regulator should be regarded as a reliable source of information and guidance, trust needs to be built continuously during normal situation and not in crisis conditions.
- The regulator should use any available means to make themselves well known: if they are not known, there cannot be a confidence building.
- The regulator needs to be out in front of the public whenever information need arises.
- Regulatory communicators should put themselves at the level of their audience.
- Public expects answers from experts; communication staff is a conduit to experts and not a barrier between experts and the public.
- The regulator should have the courage to be honest and transparent from the first moment they start communicating on an issue of general interest, no matter how unpleasant the issue may be.
- Openness and transparency, may transform a difficult issue into a non-issue.

After the Meeting in Canada, the CNRA approved a proposal from the Working Group on Public Communication, to organise a third workshop in Asia. This meeting will therefore complete a cycle of events addressing the interaction of regulators and the public, and the integrated conclusions from the three workshops should provide to the regulatory authorities, the best practical approaches to perform this complex but critical responsibility.

Regarding other committees, Mr. Tanaka will present later today the main activities of the Committee on Radiation Protection and Public Health and the Radioactive Waste Management Committee, therefore I will not enter into details. I would like only to stress that the final goal of the activities of both committees is to promote common understanding amongst its members and to share experience regarding ways to enhance dialogue amongst all interested parties.

In summary, I am very pleased that the CNRA has organised this Workshop to address this important question of transparency of regulatory activities. I think that altogether, to analyse the good practices and where you can really advance in being more transparent and increasing public trust in the regulators, is extremely important. Trust of the public in regulation and in the regulatory bodies is an essential element for the stability of our societies which are using nuclear power. But I would like to make a difference between building “trust” and asking for “faith”. Faith is a very subjective feeling very unstable, while trust is based on everyday work and the accountability of the regulator, it is more difficult to obtain but more stable. So a regulator should build public trust not ask for faith.

I expect the Workshop will provide an excellent opportunity to share information, ideas and experiences in the field of transparency of regulatory decisions and public communication. I am convinced that we still have to learn from others about developments, techniques, procedures and achievements in the area of nuclear regulatory communication with the public.

To finish, I would like to thank again the Japanese Government for hosting this important event. I also want to transmit NEA gratitude to the organising committee and the working group on public communication, for developing such an interesting programme. And of course, to the participants that will be the main actors of this meeting.

Thank you for your attention.

EXPECTATIONS FROM THE WORKHOP

Dr. Kenkichi Hirose
Director-General, NISA, Japan

1. Significance of Holding the Workshop

- (1) With regard to nuclear safety, the regulatory agencies' accountability to the public keeps increasing.
- (2) "*The transparency of regulatory activities*" is a challenge common to all nations. Recognition of a universal challenge and the sharing of knowledge and experience are beneficial.
- (3) We hope that this workshop will increase understanding of "*the transparency of regulatory agencies*" among the nations concerned and enhance nuclear safety further.

2. Nuclear and Industrial Safety Agency's 2 Priority Areas

(1) Public hearings/PR activities

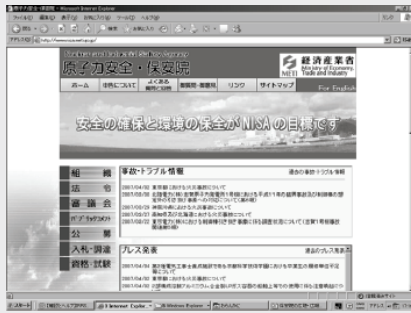
(2) "Relationship Management "(RM)

(1) The Agency's Public Hearings and PR Activities - Steps Taken for Public Hearings/PR Activities -

- 1) Establishment of Nuclear Safety Public Relations and Training Division (April 2004)
 - This section was formed to take charge of the Agency's public hearings/PR activities centrally.
- 2) Placement of Regional PR Officers for Nuclear Safety (April 2004)
 - PR officers are stationed in four Inspector Offices at Aomori, Fukushima, Niigata and Fukui.
 - They actively engage in providing information to local assemblies and local governments and participate in public hearings and PR activities for local media etc.
- 3) NISA executives visit and provide information to local governments
 - NISA executives visit local governments and provide direct explanations of important matters concerning nuclear safety regulations.
 - More than 100 visits per annum have taken place in recent years.
- 4) Expansion of public hearings and PR activities
 - Dialog-style public hearings/PR activities and public hearings/PR activities with residents' participation is implemented.

(1) The Agency's Public Hearings and PR Activities
 - Public Hearings and PR Activities Using Traditional PR Media -

Homepage



Cable television (NISA-TV)



Leaflets



(1) The Agency's Public Hearings and PR Activities
 - Public Hearings and PR Activities Using Traditional PR Media -

Newsletters (NISA Press)



(1) The Agency's Public Hearings and PR Activities - Dialog-style Public Hearings and PR Activities -

Get-together for discussion (Project for promoting regional dialog on nuclear safety)



Shiga-cho,
Ishikawa
Prefecture



Tomari district,
Hokkaido



Genkai-cho,
Saga Prefecture

(1) The Agency's Public Hearings and PR Activities Public hearings/PR activities with the participation of inhabitants

One-day Nuclear and Industrial Safety Agency

"Plu-thermal" Symposium (Ikata)



(2) Relationship Management - Basic Concept of RM Activities -

[Purpose]

Evaluations received from outside stakeholders such as the people, local residents and news organizations are incorporated into the qualitative improvement of regulatory activities and to gain their trust.

[Method]

Information on regulatory activities is supplied by taking various opportunities and proper feedback concerning the stakeholders' reaction is carried out.

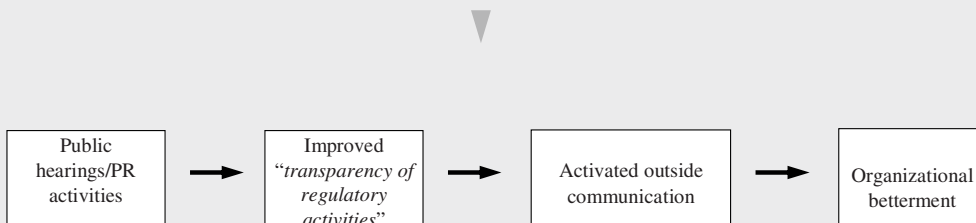
[Systematization]

Placing RM activities in the Agency's management system and activating internal communication, enhancement of the motivation of the Agency's staffs and continuous qualitative improvement of regulatory activities will be systematized.

(2) Relationship Management

- Relationship between RM and "*Transparency of Regulatory Activities*" -

By improving "*the transparency of regulatory activities*" through public hearings/PR activities, communication with outside stakeholders will be activated, in order to improve the organization.



3. Conclusion (Expectation from the Workshop)

- (1) "*The transparency of regulatory activities*" through increased communication with each stakeholder, not merely by the one-sided supply of information, is important.
- (2) It is important to share various experiences and exchange opinions concerning transparency of regulatory activities among participating nations and organizations in this workshop.
- (3) The efforts of OECD/NEA to organize this workshop and the participation by the various nations and the agencies are greatly appreciated.



Workshop Objectives

- Develop common understanding of stakeholders' expectations of transparency
- Share practices of implementing transparency
- Share experience of how the development of transparency impacts on the regulator
- Identify important issues and lessons learnt



Workshop Sessions

1. Understanding Transparency
2. Stakeholder Expectations Regarding Transparency
3. Conditions for Ensuring Transparency
4. Changing Regulatory Practices for Ensuring Transparency
5. Methods for Evaluating Transparency
6. Concluding Session
7. Optional Session in Tokai-Mura



Workshop Outcome

- Capture key points from each session
- Draw conclusions from across the sessions
- Professor Jukka Laaksonen highlights key outcomes
- Proceedings will be documented
- Report key outcomes to CNRA

SESSION 1

UNDERSTANDING TRANSPARENCY

Chair: Mr. Gregory Jaczko, Commissioner, USNRC

Co-Chair: Dr. Peter Storey (HSE)

Facilitator: Prof. Masaharu Kitamura, Emeritus Professor, Tohoku University, Japan

CHAIR'S KEYNOTE SPEECH

OPENNESS AND TRANSPARENCY: THE ROAD TO PUBLIC CONFIDENCE

Mr. Gregory Jaczko

Commissioner, NRC, United States

Thank you, Dr. Storey and I appreciate the opportunity to chair the first session of this very important workshop. We will have some very interesting discussions from the three people who will be talking today and we are very honored to have a facilitator with the background that Professor Masaharu Kitamura has.

I would like to say just a few remarks about my thoughts on the topic of transparency before I turn it over to each of the speakers.

About three months after I became a Commissioner, I was invited to give a talk at the Regulatory Information Conference which is the big annual conference the U.S. Nuclear Regulatory Commission hosts. Many of you, I know, have participated in that conference, and we certainly appreciate that. One of the issues I thought a lot about at that time was the importance of public confidence and public confidence in the work that we do.

Being new to the Commission I talked to some of my fellow Commissioners to get their insights on public confidence. One of the things that they told me was that it is very difficult for the Nuclear Regulatory Commission or any regulatory agency, to control public confidence. Public confidence is not something that we license. It is not something that we regulate, so it is very difficult sometimes for a regulatory body to demand public confidence. So I thought about that and listening to some of the things that were said earlier this morning by many of the speakers, it was clear that the thought process that has developed for these workshops was very similar to the thought process that I went through. That is, to break down the idea of public confidence and identify the components that allow a regulatory body to have an influence. While we may not ultimately be able to control and dictate public confidence, in the end, regulatory bodies can do things to improve and instill public confidence in their decisions.

There are several key components to public confidence. One of them is openness and another is transparency. When I gave that talk two years ago, I tried to focus on distinguishing those two things because they are very different.

Openness from the perspective of the United States and from a regulatory body involves the idea of access to information. We have a large number of statutory responsibilities that dictate how we provide information to the public about the actions and the activities that we undergo. I believe openness is an easy thing for a regulatory body to control. We can measure it. We can determine how well we're doing it – providing information to the public. But providing information is just the first part.

It is the second part which goes a long way toward public confidence and I look forward to hearing from the other speakers about their ideas about what transparency means. For me transparency

means clearly explaining the decision-making process and how we use the information that we have. Both of those things are crucial for the public to understand the conclusions in the decisions that we make. Not only does the public need to have access to the same information that we have, but they have to have access to understand the decision-making process we use as a regulatory body. And that is really where transparency comes in.

So that is a little bit of my thoughts of what transparency is and I just want to touch on a few examples of why I believe it is such an important issue. With many of the things that we do in the regulation of nuclear power, these issues are never new. Some of them are issues that go back very far and that others at the NRC have touched on in different ways. I have to credit some of this going back to Chairman Ivan Selin, who in the early 1990s, stated that the NRC should increase its “efforts to reach out to the public at large to recognize how important public credibility is to the achievement of its regulatory goals.” That was something that was said in the early '90s and it's something that we continue to work on now as an agency and as a regulatory body.

Transparency and openness really go hand in hand towards the NRC achieving public credibility and public acceptance of decisions that we make. There are several recent examples of where we lack some of that public trust and public confidence and it has, in fact, created more work and more effort on the part of the agency.

One issue – that I believe will be addressed a little bit later by one of the other speakers – has to do with releases of tritium-contaminated water at several facilities in the United States. None of the releases were a threat to public health and safety. Some of the releases at some facilities are no unusual and are on-going. Yet, there was tremendous public outcry in many communities about these releases. Communities that previously had been very supportive of the nuclear facilities were now raising serious questions about the performance of those facilities.

The interesting aspect that really touches on the issues of public credibility and ultimately then transparency was the public's reaction to the NRC response. When the NRC made very strong statements that these were not threats to public health and safety, the public did not immediately accept those explanations. Therein laid the challenge.

We now, as an agency, not only had to do a tremendous effort to get the public to be comfortable with our decisions, we then had to educate the public about the implications of tritium contamination. This is where it is so important for the agency to make sure that we continue to maintain credibility. This issue was resolved really by the industry initiating a program to monitor groundwater contamination or groundwater releases in a much more rigorous manner. That ultimately was the answer about openness and transparency.

So nothing really changed from our perspective in terms of how we regulated these releases. We did not change any regulatory safety thresholds for releases of tritium. We didn't make any changes that had an impact on public health and safety. But the kinds of changes we made had to do with the issues of credibility, with openness and transparency. The agency itself made some changes. We underwent some examinations of this issue and we, in fact, reinstated a practice of publishing information about releases of this kind so that people would be made more aware of them. They may happen on a somewhat regular basis, but that does not pose, in our view, a public health and safety risk. Crucial again to that was the issue of transparency. The public needed to understand the process of how we reviewed and monitored releases from nuclear power plants. And that's where the transparency aspect came in.

So that was a very specific example of something that happened since I have been a Commissioner that really tested the issues of trust and faith. In the current era, openness and transparency are extremely important. We live in an age now where information access is very easy, with the Internet. People can learn a lot about nuclear power plants. They can learn a lot about the facilities that we regulate. And sometimes that information is accurate. Sometimes it's not accurate. It's certainly important from an openness standpoint that the agency is providing so much information because we have been entrusted by our government and ultimately by the American people to be shepherds of that information.

The other important issue that was touched upon earlier was the issue of security which in the United States has been a very important issue. And it is there that transparency and openness have been extremely important because in security space or for security issues, we cannot be as open with information. We cannot provide details of security plans for facilities. We cannot provide details of threat information, except to specifically cleared individuals. But what we can do is be transparent about how we're using that information in the decision-making process. That is again where the distinction between openness and transparency becomes so important and where we begin to have to rely on trust.

The public has to trust the information that we have as accurate and reliable and they have to then have confidence in our decision and in our analysis of that information. That is where transparency is so important.

To conclude, one thing that is important to keep in mind, and is perhaps a workshop in and of itself, is the term that we use in this kind of a context which is the "public". I have given many speeches and I always like to talk about the public. I've heard many people just in this morning's session talk about the public and I suspect that we'll hear from the speakers in this particular session about the public.

The public, of course, is a very, very broad group. In fact, to some extent it's everyone. It includes the people who work at our agency. It includes me and it includes my mother, my father, my sister, as well as other members of my family. It includes the licensees. It includes a very important stakeholder for us, the Members of Congress. Each of these different members of the public has different expectations about openness, about transparency. One of the biggest challenges is making sure that we work to find out who the most important and most influential members of the public are going to be on any issue. Sometimes those members of the public don't present themselves and we have to find them. And that is one of the challenges that we face as regulatory bodies in moving forward.

It would be helpful as we go forward to keep in the back of our minds who we're talking about with the public, who are the customers for this information, and who are the customers for the transparency that we seek. In some cases that will be different in different countries. In some cases it will be different for different issues, but it is certainly an important issue that is crucial to really getting the issue of transparency correct.

Thank you for letting me share these comments with you. I would now like to turn the session over to our first distinguished speaker, Dr. John Loy, Chairman and Chief Executive Officer of the Australian Radiation Protection and Nuclear Safety Agency.

THROUGH A GLASS DARKLY – THE MEANING OF TRANSPARENCY

Dr. John Loy

Chief Executive Officer of ARPANSA, Australia

Abstract

The paper first discusses the word “transparency”. It is a metaphor drawn from optics; it is a term used in social and political science; the international civil society organisation. “Transparency International” sees it as the paradigm to fight corruption in the world.

From this discussion, the paper offers a working definition applicable to a nuclear regulatory organisation.

The paper describes a difference between having transparent process, which might be called passive transparency; and transparent engagement with stakeholders – active transparency.

It discusses some of the issues and problems that arise for a nuclear regulatory organisation seeking to operate transparently. Much of the difficulty with true transparency is that it reveals the “untidiness” of life. “We see now as through a glass darkly”.

What is the general view of society and the cultural attitudes towards Government agencies revealing that they are not perfect? Can you have a transparent nuclear regulator of a secretive industry and with other stakeholders having political agendas? How can a technical ‘judgment call’ ever be fully transparent? Can an active culture of transparency sometimes result in a mere public relations campaign? Can transparency in a nuclear regulatory create expectations amongst stakeholders that will prove impossible to meet?

These questions are discussed with some real-life examples.

The paper concludes with some suggested “fundamentals” for transparency in nuclear regulatory organisations.

Introduction

The Oxford English Dictionary defines the earliest meaning of “transparency” as:

Having the property of transmitting light, so as to render bodies lying beyond completely visible.

Quite early in its life, back in the sixteenth century, the word also became to be used to define human actions as:

- a) *open, candid, ingenuous;*
- b) *easily seen through, recognised or detected; manifest, obvious.*

Thus a nineteenth century author could refer to “the transparent sincerity of his purpose.” Or you can refer to someone telling a transparent lie – a lie that can be seen through because of how the teller behaves.

Applying the word “transparency” to the way in which organisations and governments manage themselves is a twentieth century concept. For example, in 1993 the civil society international organisation “Transparency International” was launched. Its role is to promote the fight against corruption in the world – and as its title suggests, it sees transparency, or openness of process, as a way to do that by holding public officials accountable.

The use of the word transparency in relation to radiation protection and nuclear safety is very recent. For example, I could not find “transparent” or “transparency” in the IAEA Basic Safety Standards published in 1996. Nor are they found in CNRA’s Green Book on the regulator and safety culture published in 1999; they do, however, appear in the CNRA Green Book on nuclear regulatory decision making, published in 2005 (twice for “transparent”; twice for “transparency”). However, no definition of transparency in the context of nuclear regulation is offered in these publications.

The International Nuclear Safety Group (INSAG) refers to transparency in its 2003 publication on the independence of the regulatory body as follows:

Transparency is a means to promote independence in regulatory decision making and to demonstrate such independence to politicians, licensees and other stakeholders, as well as the general public. The regulatory body needs to have the authority and the obligation not only to communicate its regulatory decisions and their underpinning documentation to the licensee(s) concerned, but also to make this information available as far as possible to the public. By means of such public access to information, the independence in regulatory decision making can be open to public scrutiny. At the same time, this serves to fulfill the requirement for the regulatory body to be accountable to the public, whose health and safety it is responsible for protecting.

So in the light of this background what do I think transparency means in relation to nuclear regulatory decision making?

Nuclear regulatory decision making

The Green Book on nuclear regulatory decision-making describes the following steps in the regulatory decision making process:

1. clearly define the regulatory issue on which a decision must be made;
2. assess the safety significance;
3. determine the laws, regulations, or criteria to be applied;
4. collect data and information;
5. judge the expertise and resources required;
6. agree on the analyses to be performed;
7. assign priority to the issue among the other workload of the agency;
8. make the decision;
9. write a clear decision and publish it.

The last step – write a clear decision and publish it – is surely the most fundamental aspect of transparency for any regulator making a decision. A document that is available to all stakeholders and that sets out the basis for the regulatory decision in clear terms provides the essential basis for a view into the working of the regulator that any definition of transparency must demand.

But writing a clear decision and publishing it is *post hoc* – it comes after the decision is made and after steps 1 to 8 have been gone through – how can these earlier stages also be transparent? Does every step along the way have to be revealed to all stakeholders and must they have a chance to intervene or at least provide input at each step in the process (recognising that a number of the steps may be simultaneous, rather than sequential for any given issue)? This seems unrealistic.

The very simplest form of transparency that should apply to all the elements is that the regulator's general process for making a regulatory decision – the process for moving through the above 9 steps – should be publicly stated by the regulator and known to stakeholders. And the stated process should be consistently followed, unless there is a specific and stated reason why it is not in some case. The regulator should make known the general process that is followed for analysing issues and taking decisions. Included in that, would be knowledge about the points when stakeholders may be asked to provide input.

One simple piece of transparency may need to occur even before the steps of regulatory decision making are applied. That is, it should be transparent – known to stakeholders – that there is a regulatory decision to be made. Of course, that will be obvious enough if the decision is about, say, the siting of a new nuclear power plant. It may, on the other hand, require a public action to make transparent that the regulatory decision is about whether to give regulatory approval to a proposal for a plant modification or a significant organisational change; and this public knowledge may be quite problematic for the operator if the regulatory decision is about the response to take to certain adverse inspection findings.

And of course a nuclear regulator may make a very large number of decisions in a year – are they all able to be given the full transparency treatment? This is a genuine difficulty – one way of clouding effective transparency is to drown stakeholders in a host of unnecessary and irrelevant information. On the other hand, who is to judge what the regulatory decisions that stakeholders may deem important are?

A working definition of transparency for nuclear regulatory activities

I offer this definition of transparency for nuclear regulatory activities:

Nuclear regulatory activities are transparent when:

- *The basis for taking nuclear regulatory decisions is able to be known by stakeholders and is followed by the nuclear regulatory body in taking those decisions;*
- *Stakeholders are able to be aware of the nuclear regulatory activities that may be of interest to them; they have access to information before the nuclear regulatory body – with the exception of information that is properly confidential; and they have the opportunity to provide input to the nuclear regulatory decision making;*
- *The decisions of the nuclear regulatory body are clearly described and available to stakeholders.*

This definition describes a passive form of transparency – it is up to the stakeholders to make use of it.

I add a further element of the definition that can be characterised as active transparency:

Nuclear regulatory activities are transparent when the nuclear regulatory organisation presents and promotes to stakeholders the basis for its decision making, seeks input into its decisions and explains and promotes the reasons for its decisions.

As an aside, a high level task group formed by CNRA is looking at preparing a Green Book on assuring nuclear safety. This topic is about the regulator making an overall judgement about the safety of a plant drawing on the breadth of information from operating experience reports, inspections and audits, observations of attitudes to safety, proposals for modification and so on. The process for forming such overall judgements needs to be transparent in the terms that I have described for it to achieve the assurance of safety that is sought.

Through a glass darkly – Issues in transparency

A nuclear regulatory organisation is a part of its society – and it is established by the Government and, in ways that are differently expressed from place to place, it is a part of the Government. How much more transparently than the Government as a whole can the nuclear regulatory organisation be? And an important underpinning of transparency is some form of overall ‘Freedom of Information’ legislation that would both require and empower the release of information to the public – and define the categories of information that can be held as confidential.

The nuclear regulatory organisation regulates an industry that is subject to commercial pressures and which may operate with quite a different culture with respect to transparency. If the regulator is too far ahead of the industry in terms of transparency, this may result in some information being kept from the regulator. The definitions of what is properly confidential information need to be carefully worked through and accepted by the regulator, the operator and other stakeholders; but there will be disagreement at the margins and debates about the classification of particular documents.

Many of the stakeholders have strong views about the industry and the regulator and are prepared to use information in a way that gains them a political advantage. The media make judgements about

issues on a different basis from the scientific and dispassionate view of the regulator. A transparent regulator will thus have the basis for its decisions challenged, perhaps through legal proceedings and certainly in the media and by political action. Any apparent inconsistency between regulatory decisions will be evident and will be pointed to.

In all these circumstances, transparency can be a hard ideal to live up to. And as St Paul said, we see now as through a glass darkly. Things are never crystal clear and transparency allows the messiness – the chaos – of real life to be seen.

I do want to emphasise that genuine transparency is not just about “communication” with stakeholders, important though that is. It is about stakeholders having access to the information and basis for decision making to allow them to make their own judgements and assessments of the regulator’s effectiveness.

In making a commitment to transparency, the nuclear regulatory organisation needs to think about:

- How will the Government, the stakeholders, the media and the public react to learning that the regulator is a human organisation with imperfections? For example, during an assessment leading to a regulatory decision, there may be disagreements between staff members of the nuclear regulatory organisation as to the significance of a particular finding. Such disagreements may be expressed in strong, even colourful language, in email exchanges between people who otherwise would prefer to be seen as dispassionate and technical experts;
- How are technical “judgement calls” to be made transparent? Often, a regulatory decision may turn on a judgement made by a highly qualified person drawing on his or her experience. This needs to be honestly recognised and not disguised with spurious technical justification.

Communication is an important factor in transparency. But the regulator should guard against communication becoming only public relations. We have all seen “corporate and social responsibility” reports from companies showing how they meet their environmental and other obligations with pictures of lovely young people running along the beach. If it used largely as public relations, “transparency” could earn a bad name and only increase cynicism and mistrust.

Fundamentals of transparency for a nuclear regulatory organisation

From the discussion in the paper, I offer for discussion the following *Fundamentals of Transparency for a Nuclear Regulatory Organisation*:

1. The nuclear regulatory decision-making process of the nuclear regulatory organisation must be clearly described and stated, including the points where stakeholders may intervene. The decision-making process must be followed by the nuclear regulatory organisation unless there is a clear reason not to do so in a particular case and the reasons for this are publicly stated by the nuclear regulatory organisation.
2. There must be a clear basis for public access to information held by the nuclear regulatory organisation, and a clear statement of the limitations to that access arising from security and proper commercial confidentiality; freedom of information legislation is desirable in this regard.

3. The “nuclear regulatory decisions” that are before the nuclear regulatory organisation must be available to be known to stakeholders.
4. A clear regulatory decision that explains the basis for the decisions must be written and made public for major decisions.
5. An annual report on the regulator’s overall assurance of nuclear safety must be prepared and made public by the nuclear regulatory organisation.
6. The nuclear regulatory organisation must undertake an active programme of communication with stakeholders, aiming to inform rather than persuade.

TRANSPARENCY VIEWS BY MEDIA

Mr. Yojiro Ikawa

Yomiuri Newspaper, Tokyo Office, Japan

Abstract

In this presentation, various problems surrounding the issues of transparency, such as “What exactly should be transparent?” “Is all that we want amounting only to transparency?” “Is it possible to thoroughly implement transparency,” etc., are discussed with due consideration for the viewpoints of the wide range of parties concerned involving areas of politics, administration, enterprises, media, individuals, and so on.

First of all, the explanation is focused on how the transparency is recognised, as well as how it is regarded as important, for the public at large and the media. Then, based on the concept that transparency is required for what cannot be justified to be secret, we will contemplate what should be transparent in the areas of politics, administration and enterprises, using the case of nuclear issues as example. Next, the discussion will proceed to the point whether the achievement of transparency itself should be the ultimate goal, in the light of taking into consideration the standpoints of individuals and the receivers of the information, in addition to that of the administration, politics, and enterprises. In closing, we will discuss what the necessary measures will be to materialise the complete transparency on the basis of the discussions made thus far.

What is “Transparency”?

- When expressed in terms of material... ..
Glass, Water, Air
- When expressed in terms of image... ..
Freshness, Nothing to hide, Easy to understand

⇒ Why is it so important?

Transparency for the public

- An essential part for judgment and comprehension
- A legitimate request and right to the government, administration and industry
- Foundation for the establishment and maintenance of sound democracy
- Criteria for the credibility of the government, administration and industry

Conventional wisdom of the public

⇒ Everything should be transparent.

Transparency for the mass media

- Prerequisite for the accurate and fair-minded report
- Equals the right to know, the right to free access to information
- The area to accuse when questioning the management accountability of the government, administration and industry

Conventional wisdom of the media

⇒ Everything should be transparent.

Everyone is extremely fond of “Transparency”.

- Clear image
- The area to accuse for the mass media
 - “Without transparency, it is impossible to gain public trust and understanding.”
 - “What is important is the transparency of the administrative management.”
- A vote-getter during elections
 - The ex-governor of Nagano prefecture set up a fully transparent “glassed-in office”.



ガラス張りの知事室(左)をこけるため、記者が押し入る様子

ガラス張り知事室も最後
田中康夫知事 退任

長野県知事の田中康夫氏(50)が1日、任期満了で退任した。「ガラス張り知事室」を初めて一般開放するなど、最後の日まで「田中流」を貫いた。

県庁1階にある「ガラス張り知事室」は午後2時から約2時間、「知事室ファイナル 誰でも入れるデー」と称して県民に開放された。数百人が殺到し、知事室前は長い列が伸びた。室内では、田中氏に記念撮影やサインを求める姿が相次ぎ、中には「知事に戻ってきて」と涙ながらに呼びかける女性も。

1日から知事に就任する元防災相の村井仁氏(69)は「ガラス張り知事室」を使用しないとしている。

Nagano governor (during the term of 2000-2006) Yasuo Tanaka

A news article of his resignation in the Yomiuri Newspaper (1st Sep. 2006)

The end of the glassed-in governor's office

Does “glassed-in” achieve transparency?

- Actual administration is a different matter.
- Policy decisions are seldom made in a governor's office.
- Data is usually not visible.
- So, what is visible? Wasteful use of tax revenue?

⇒ Is the only thing to know if the governor is present or not?

- Is this the matter that needs to be transparent?

What should be transparent

Surely,
excuses for “hiding”,
“keeping secrecy”
and “non-disclosure”
cannot be allowed.

What should be transparent

– Examples in administration

- Data they possess
- Laws, regulations and guidelines that support decisions and actions
- The decision-making process
- Enforcement of actions
- Adequate use of budget
- Organization
- Qualifications of officers

And others

What should be transparent

– Examples in the politics

- Processes and bases for decision-making
- Details of discussion
- Qualifications and competence
- Personal history
- Personal connections
- Thoughts and principles
- Financial resources

And others

What should be transparent

– Examples in industry

- Corporate information
 - Accounting, assets, administrative organization
- Products and service information
 - Safety
 - Quality and standards
 - Trouble information
- Social responsibility
 - Environmental-friendliness

And others

Examples in Nuclear – Administration

- Severe accident management
 - Implemented in the 1990's.
 - Meltdown probability of individual plants were at first confidential.
 - Reason 1 = “Incomprehensible to Japanese citizens”
 - Reason 2 = “Opposed by Utility companies”
 - Open to the public in Europe and the United States.
 - A government official who explained about reasons 1 and 2 in the international symposium was laughed at by audience, foreign officials.
-

Examples in Nuclear – Politics

- Siting of the high-level radioactive waste repository
 - In February 2007, Toyo-cho local government of Kochi prefecture applied for feasibility study for siting. This was the first case in our country, so logically we expected that the first step would be taken... but,
 - The Kochi governor opposed due to “lack of transparency”.
 - “Explanation to local residents is not good enough to obtain their consent.”
 - “The National government is just like controlling local government with subsidy or cash.”
 - “Transparency” had become a political issue.
 - The discussion of “radioactive waste solution to secure energy”, which is the actual topic to focus on could not even begin.
-

Example in Nuclear – Industry

- Too many cases!
 - The criticality accident at Hokuriku Electric Power Co.'s Shika Nuclear Power Plant (Revealed in 2007)
 - The same case at Tokyo Electric Power Co.'s Fukushima Nuclear Power Plant (Revealed in 2007)
 - Falsified inspection data by Tokyo Electric Power Co. (Revealed in 2002)
- And others
- Are there really no similar cases with BWRs in other countries? Although Japan's cases have been brought to attention... Lack of transparency in the nuclear industry was revealed.

Is transparency the effective solution?

– Administration

- Security
 - Physical protection of nuclear materials and anti-terrorism in the nuclear sector
- Safety assurance (Prevention of panic, concealment of weakness)
- Personal information
- Commercial confidential information
- Ensuring of fair competition (concealment of bid price, etc.)
- Siting problem (prevention of land buyout, skyrocketing land prices)

Is transparency the effective solution?

– Government

- “Disclosure” is directly linked to a vote-catching policy.
 - It becomes impossible to discuss according to one’s real opinion.
 - Prior consensus-building process does not work.
 - Is it possible to prevent panic and/or confusion?
 - It is necessary to give consideration to the feelings of relevant people.
 - International negotiation
 - Telling a lie for the sake of national interests may sometimes be excused.
-

Is transparency the effective solution?

– Industry

- Commercial confidential information, corporate strategy
 - Concealment of technology and know-how
 - Concealment of business information
 - Confidentiality obligation under a contract
 - Their relationship with national and local governments is important in the nuclear sector.
 - Before disclosing accident information, industries must consult with the relevant prefecture and local governments first, and then consult with the national government. Deviation from this sequence may cause a serious problem.
 - The content of disclosed information may be restricted.
-

Is transparency the effective solution?

– Individual

- Information owned by the organization can not be disclosed freely.
 - It is never easy to insist on transparency.
 - Relevant person in falsification at Hokuriku Electric Power Co. was then promoted to managing director after the incident. If he had insisted on transparency at that time, he would not have been in his present position...
 - Risk of being ostracized
 - Sharing secrets strengthens a sense of fellowship.
 - Evasion of responsibility
 - Nobody wants to be blamed.
 - Top management and organizational structure are important.
-

Is transparency the effective solution?

– Recipient (1)

- Even if transparency is ensured, many aspects are difficult to understand.
 - Principles of Chemistry and biology are transparent. Textbooks and scientific papers are accessible, too.
 - But, it is not easy to understand.
 - A recipient may misunderstand about the safety of chemical materials and life science.
 - As for the nuclear sector, the principles and the mechanism used are open to the public, but...
 - In many cases, recipients (both the mass media and individuals) reword “difficult to understand” as “lack of transparency”. Just like taking it out on others.
 - There are many examples in which cases are preceded by anger and emotion, and an understanding could not be reached.
-

Is transparency the effective solution?

– Recipient (2)

- The story of “Washington’s Cherry Tree”
 - A story from Washington’s childhood (It seems to be a fable...)
 - Little Washington accidentally broke a branch off a cherry tree in the garden.
 - He had the courage to confess and apologize to his father.
 - The father praised his son for his courage and honesty.

⇒ Reality, however, is more crucial.

- Taking the case of Hokuriku Electric Power Co. as an example, the voluntary release of information was not appreciated.
 - It may have lead to “a policy of see no evil, hear no evil” and consequently the “obstruction of encouraging transparency”.
-

TRANSPARENCY AS AN ELEMENT OF PUBLIC CONFIDENCE

Dr. Ho Kee Kim

Director of Policy Development Division, KINS, Republic of Korea

Abstract

In the modern society, there is increasing demands for greater transparency. It has been discussed with respect to corruption or ethics issues in social science. The need for greater openness and transparency in nuclear regulation is widely recognised as public expectations on regulator grow. It is also related to the digital and information technology that enables disclosures of every activity and information of individual and organisation, characterised by numerous “small brothers”. Transparency has become a key word in this ubiquitous era.

Transparency in regulatory activities needs to be understood in following contexts. First, transparency is one of elements to build public confidence in regulator and eventually to achieve regulatory goal of providing the public with satisfaction at nuclear safety. Transparent bases of competence, independence, ethics and integrity of working process of regulatory body would enhance public confidence. Second, activities transmitting information on nuclear safety and preparedness to be accessed are different types of transparency. Communication is an active method of transparency. With increasing use of websites, “digital transparency” is also discussed as passive one. Transparency in regulatory process may be more important than that of contents. Simply providing more information is of little value and specific information may need to be protected for security reason. Third, transparency should be discussed in international, national and organizational perspectives. It has been demanded through international instruments. In each country, transparency is demanded by residents, public, NGOs, media and other stakeholders. Employees also demand more transparency in operating and regulatory organisations. Whistleblower may appear unless they are satisfied. Fourth, pursuing transparency may cause undue social cost or adverse effects. Over-transparency may decrease public confidence and the process for transparency may also hinder regulatory activities. It may further prevent open and frank discussion. Careful consideration should be given when publicising certain information which affects specific and identifiable people or areas. Fifth, transparency should be understood and discussed in terms of “Risk Governance” as it is related to stakeholders’ participation.

Understanding transparency as one element for confidence in regulator and considering its adverse aspects, transparency strategy should be devised and carefully implemented.

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- I. Introduction
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 - 1. Regulatory transparency
 - 2. Operational transparency
 - 3. Work transparency and challenges
- III. Experience of Korea
- IV. Conclusion

I. Introduction

➔ Public confidence and its elements

- Regulatory goal
 - To ensure that nuclear facilities are operated at all times in an acceptably safe manner
- Public confidence in nuclear regulator
 - Another axis of public satisfaction of nuclear safety together with the confidence in utility, toward public acceptance of nuclear
- Elements of public confidence
 - Competence or capability
 - Openness including **transparency**
 - Consistency in words and behaviors
 - Sharing values and ideas
 - Consideration
 - Communication

➔ General transparency (by Wikipedia)

- Defined as openness, communication and accountability
 - To prevent the abuse of entrusted power for private gain
 - Achieved by participation and discussion between the authorities and the public
 - For all information to be open and freely available, in the areas of government, politics, ethics, business, management, law, economics, sociology, etc.
 - Transparent procedures
 - Include open meetings, financial disclosure statements, the freedom of information legislation, budgetary review, audits, etc.
- ✓ Focus on ethics, however, transparency in nuclear involves considerable complexity beyond the abuse of entrusted power

➔ Openness and transparency by the OECD (2005)

- Openness to the public
 - **Know thing** to obtain relevant and understandable information, **get thing** to obtain services from and undertake transactions with the sectors, and **create thing** to take part in decision-making processes
- Openness from public sectors
 - **Transparency** to be exposed to public scrutiny, **accessibility** to anyone, anytime and anywhere, and **responsiveness** to new ideas and demands

➔ To achieve transparency

- Freedom of information laws and centralized registers of current laws and regulations for public scrutiny
- Electronic systems for searching, selecting, integrating, and presenting: e-government system
- Publication of annual reports, performance data and public account, as well as strategic plans, legislative timetables, forthcoming projects and upcoming consultations

➔ Transparency types from nuclear regulator

- Regulatory transparency
 - To enhance predictability for licensing applicant, utility, or international designer and/or vendor
 - Legal and procedural transparency related to nuclear industry
- Operational transparency
 - To indicate soundness in implementing the entrusted power in accordance with rules and regulations related to organization operation as the public authorities
 - Managerial and/or organizational transparency
- Work transparency
 - To promote the public understanding on its activities related to nuclear safety
 - Public confidence related

II. Transparency and Challenges

1. Regulatory transparency

➔ Definition (OECD, 2001)

- Capacity of regulated entities to identify, understand and express views on their obligations under the law

➔ Elements

- Consultation with interested parties
- Plain language drafting of laws and regulations
- Legislative simplification and codification
- Registers of existing and proposed regulation
- Electronic dissemination of regulatory material
- Controls on regulatory discretion through standardized, transparent procedures for making, implementing and changing regulations
- Appeals process that are clear, predictable and consistent

- ✓ Focus on institutional transparency in economic sectors for trade and consistent to the general practices in nuclear regulation
- ✓ Secured, in general, a high level of the regulatory transparency in the field of the peaceful use of nuclear energy
 - Development history and utilization experience, international safety regime established and encouraged, international benchmarking promoted in nuclear regulation, and so on

2. Operational transparency

➔ Definition

- Capacity of organization to express the soundness of organizational performance

➔ Elements

- Accountability to present an account of, and answer for, the execution of organization
 - Controllability to provide reasonable assurance regarding effectiveness and efficiency of operations, reliability of reporting and compliance with applicable laws and regulations
 - Ethics management to buildup public confidence
- ✓ Part of the public sectors, nuclear regulatory organization, operated in line with the social circumstance of the country

3. Work transparency and challenges

➔ Definition

- Capacity of nuclear regulator to visualize regulatory and operational transparency with respect to public confidence, in an effective and efficient manner

➔ Fundamental challenges

- Influenced by the movements of reduction and delegation of government authority
 - Enlarged rights and interests of the public, development of information and communication technology, and globalization
- Supplementarily contribute to public confidence in nuclear safety
 - Institutional and indirect control of nuclear utilization

- Directly affected by the safety or performance failure of nuclear utility
 - Transparency of nuclear regulator does not create that of nuclear safety and the public regards nuclear safety in the aggregate
 - Cope with the distrust immanent in the development history, sensational experience and potential hazard of nuclear utilized for public benefit, not by self-interest
 - Merge the desire of the public, emotion oriented rather than understanding technical safety, with social objectives or government policy, in terms of technical safety achievement
 - Consider the differences in political, social, cultural circumstances of countries, related to nuclear utilization and safety regulation
- ✓ Strategy to reasonably manage the work transparency, taking into account the inherent nature that is passive, limited, institutional and self-defensive

➔ Practical challenges

- Continuously improve legal system, organization operation, and public hearing and persuasion in performing institutional and organizational responsibility as part of the public sectors
 - Implement the government policy of transparency and maintain the competitiveness in comparison to other areas and internationally
 - Define the balance between transparency and confidentiality, urgency, or flexibility, in consideration of the social expectation, which is not easy to quantify or measure
 - Utilize the advanced technology to enhance transparency, and provide sound and up-to-date safety information
 - Harmonize with international convention and practice towards global safety goal
 - Frequently confront the issues raised by the public or resident, related to the incidents and licensing of nuclear facilities
- ✓ Internationally admitted model or guideline, specific to nuclear safety regulation, to remain relevant, timely, reliable and objective

III. Experience of Korea

➔ Transparency in nuclear safety regulation of Korea

- Applying the same approach as that of the government in compliance with the legislation and policy for openness
- Substantiated remarkable achievement of transparency and harmonizing with international conventions and practices on nuclear safety
 - Comprehensive legislation and policy system for safety regulation and openness
 - Active utilization of electronic system for public communication taking into account the sensitivity of nuclear safety issues
 - Publication of annual achievements and future arrangements
- ✓ Challenges towards public confidence, which is insufficient only with institutional apparatus and also originated from history, experience and public benefit of nuclear use
- ✓ International joint effort to cope with the challenges for transparency

IV. Conclusion

- ➔ **Towards public confidence, transparency in terms of “*Risk Governance*” that relates to the participation of stakeholder**
 - Fundamental and practical challenges that seems to be ever-lasting

- ➔ **Internationally common standards, specific to the openness or transparency of nuclear safety regulation**
 - Leadership of nuclear regulator and creation of public confidence, as the part of the public sectors

SESSION 2

STAKEHOLDER EXPECTATIONS REGARDING TRANSPARENCY

Chair: Dr. Kunihisu Soda, Commissioner, NSC
Co-Chair: Ms. Yeon-Hee Hah, KINS

CHAIR'S KEYNOTE SPEECH
LESSONS LEARNT ON STAKEHOLDER INVOLVEMENT
ON DECISION-MAKING PROCESS

Dr. Kunihisa Soda
Commissioner, Nuclear Safety Commission, Japan

It is my pleasure and honour to participate in this WGPC workshop as the Chair of Session 2 with Ms. Hah as the Co-Chair. Topic of Session 2 is, as you know, “Stakeholder expectations regarding transparency” and the objective of this session is to develop common understanding on this issue.

For this end, we have four presentations from various viewpoints, namely 1) perspectives of NEA, 2) industry’s view, 3) view of mass media, and 4) views of local government. I believe that these presentations will provide us valuable information and suggestion for developing common understanding on stakeholder expectations regarding transparency.

I would like to make a short introductory remark on our view on this issue based on the lessons learned on stakeholder involvement on decision making process of the Nuclear Safety Commission of Japan (NSC).

Activities of NSC are based on the Basic Policies of NSC in which Objectives and Priority Issues are described. They are: 1) To improve and reinforce quality of the activities for ensuring safety of nuclear facilities; 2) To further enhance nuclear safety regulation in near term; 3) To establish firm basis of infrastructure for ensuring nuclear safety.

It is under the item 3 that NSC makes full effort to assure transparency and traceability of nuclear regulation and promote dialogue with the general public. It is our responsibility to enhance transparency and openness within NSC for our function of licensing procedure and audit of the regulatory organizations such as NISA and MEXT.

Let me introduce our experience of public participation in decision-making process for the revision of seismic safety guidelines of NSC. For this process, NSC established a special committee for the revision. The committee consisted of experts with variety of views and opinions. Total of 80 meetings were held during the five years in the presence of the public audience of about 150 at every meeting. The committee responded all of the public comments on the draft report and finally approved the deliberation of the final report despite some disagreements remained.

Lessons learnt from this process are summarised as follows:

- The transparency of deliberation process is helpful for convincing a majority of the public.

- The flexibility of deliberation process to facilitate the committee members to exchange different views as much as possible is also helpful for moderating the conflicting opinions.
- One of the key elements is to be of patience, spending much time for deliberations without schedule-driven pressure.
- This indicates that an open communication opportunity without compulsion is useful for safety communication among stakeholders.

NSC continues our activities keeping enhancement and assurance of transparency and openness in our mind with the lessons learned on this issue.

PERSPECTIVES OF OECD/NEA ON STAKEHOLDERS' INVOLVEMENT

Mr. Takanori Tanaka

Deputy Director for Safety and Regulation, OECD/NEA

Abstract

Since 1999, the OECD has been conducting a broad-ranging programme related to stakeholder involvement.

This programme stems from the view expressed at the 1999 OECD Council Meeting at Ministerial Level that: "The political, economic and social challenges of the next century require informed and actively participating citizens. Ministers recognise their heightened responsibility to ensure transparency and clarity in policy making."

They also noticed that many OECD committees have stakeholder involvement and that this could be deepened. The NEA, one of the OECD Directorates, also initiated support to governments in their dialogue with civil society.

In April 2000 the NEA Steering Committee reviewed ongoing stakeholder related activities and agreed that these activities should be pursued further on the level and under the individual responsibility of the Standing Technical Committees involved.

Today, four NEA Technical Committees – the Committee on Nuclear Regulatory Activities (CNRA), the Committee on Radiological Protection and Public Health (CRPPH), the Committee for Technical and Economic Studies on Nuclear Energy Development and the Fuel Cycle (NDC) and the Radioactive Waste Management Committee (RWMC) – have developed activities to address stakeholder concerns, outreach to civil society and to explore participation of stakeholder in decision making.

Over this period, twelve workshops have been organised and – in addition to the proceedings of these workshops – ten reports have been published so far, analysing findings from this dialogue, providing factual information and insight in lessons learnt. Under the new Programme of Work 2007-2009, the NEA will continue to pursue these activities in the areas of nuclear regulation, radiation protection and waste management.

Major findings from above mentioned activities, in particular activities related to radiation protection and waste management, will be presented.

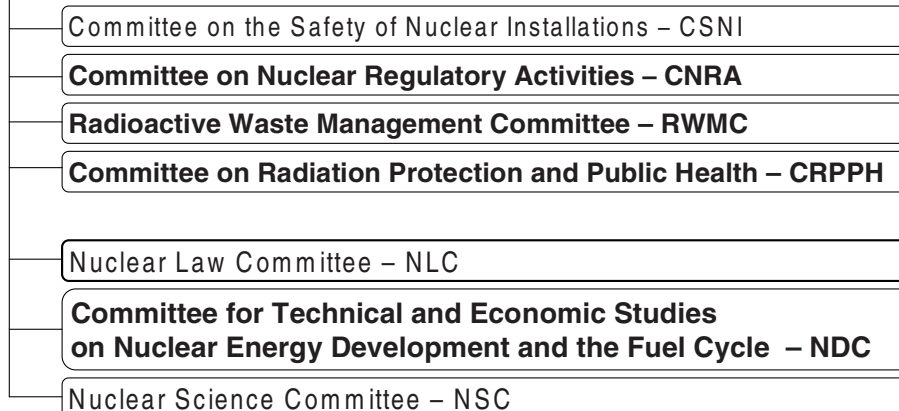
Stakeholder Involvement

- **OECD:** broad-ranging programmes related to stakeholder involvement
 - ✓ In 1999, OECD Council Meeting at Ministerial Level: “The Political, economic and social challenges of the next century require informed and actively participating citizens. Ministers recognize their heightened responsibility to ensure transparency and clarity in policy making,”
- **NEA** has developed activities related to stakeholder involvement (2000~)
 - ✓ Twelve workshops and the proceedings
 - ✓ Ten reports
- **Stakeholder Involvement** ⇒ **Transparency**

WGPC Workshop on Transparency of Nuclear Regulatory Activities on 22-24 May 2007,
in Tokyo, Japan

NEA Simplified Structure

Steering Committee for Nuclear Energy



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in Tokyo, Japan

CRPPH (1)

(Committee on Radiation Protection and Public Health)

- The activities have mainly been focused on the public (whether directly or through other organisations that protect public, e.g. Food regulator)
- The 3 **Villigen workshops** explored aspects of stakeholder involvement, largely through case studies
- 20years post-Chernobyl report – stakeholder involvement in rehabilitation

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CRPPH (2)

Key Findings

- There is substantial variation in stakeholder involvement
 - ✓ Situations vary
 - ✓ National legislation/culture/operating environments vary
- There are legal requirements related to stakeholder involvement (freedom of information acts as a minimum)
- BUT all institutes went beyond minimum. WHY?
 - ✓ Better decisions through involving those affected by the decision.
 - ✓ Better operating environment: work in a co-operative environment instead of a hostile one.

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CRPPH (3)

Key Findings : Challenges

- Need to allocate resources (stakeholder involvement is an investment)
- It is difficult to engage the public directly all of the time. What approaches to use in what situations?
 - ✓ Local liaison committees?
 - ✓ Traditional-style regulation?
 - ✓ BUT maintain openness and transparency
- Need buy-in from your staff: they are your primary stakeholder!
 - ✓ Reward system?
 - ✓ Training?
 - ✓ Senior management commitment!

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RWMC (1) (Radioactive Waste Management Committee)

Forum on Stakeholder Confidence

- Initiative to improve understanding of the principles of stakeholder interaction and public participation in decision-making related to radioactive waste management, decommissioning, and beyond.
- Standing group since 2000.
- A wide representation of civil society is obtained through workshops held in national contexts with participation of local stakeholders.
- Building of a theoretical framework to understanding waste management issues in the context of societal demands through participation of academics and social scientists (experts in community development, strategic decisions, public management, etc.)

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RWMC (2)

Key Findings: FACTORS OF CONFIDENCE

- Decision-making process (open, transparent, fair and participatory)
- Clearly defined Roles and responsibilities for different actors, including local authorities
- Main actors behaviour (reflecting values like openness, consistency, willingness to be involved in a dialogue, competence, capabilities to adapt to change...)

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RWMC (3)

Key Findings: FACTORS OF CONFIDENCE

DECISION-MAKING PROCESS

- Well-established process, recognised as fair, transparent and participatory by stakeholders
- Opened to different outcomes - none single (technical, social nor ethical) RWM solution
- Public needs to participate, when the “rules of the game” are being defined and/or at major decision
- The programme should provide sufficient time, resources and commitment for meaningful involvement of stakeholders

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RWMC (4)

Key Findings: FACTORS OF CONFIDENCE

ROLES AND RESPONSIBILITIES

- Roles of all stakeholders should be clearly defined, recognised, well-communicated and adapted, if necessary, to changing conditions
- Roles of the regulator has to be separated from nuclear energy promotion
- Active regulator involvement is needed and is achievable without compromising integrity, independence and credibility
- Regulators role includes clarification of the reasons for changing regulations and communication of the bases for their decisions

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TRANSPARENCY

- Decision Making Mechanisms and Levels of Stakeholder Involvement vary depending on societal background (culture, history, governmental system, etc.)
- Stakeholder expectations regarding transparency would vary depending on decision making mechanisms and levels of stakeholder involvement.

- ✓ transparency of information
- ✓ transparency of decision making process
- ✓ participation in decision making process

- Allocation of necessary resources and efficiency of decision-making should be considered

- Assessment of the regulatory activities would promote the transparency

(Participation Ladder)



LESSONS LEARNT BY US NUCLEAR PLANT OPERATORS

Mr. Walter Hill

Director, Communications Services, Nuclear Energy Institute, United States

Abstract

Over the past half-century, the United States nuclear energy industry has emerged as a consistently reliable source of baseload electricity, sustaining levels of productivity once thought unachievable and earning a solid reputation as a leader in industrial safety. Over time, the American industry has refined its abilities to share operating experience, learn from mistakes, apply lessons learned and ultimately win the confidence of the public majority. As the United States industry has evolved, it has adopted the core principles in nuclear communications of openness and honesty – “transparency.” The industry has made great strides in applying these principles, yet select events continue to reaffirm their importance.

The 1979 Three Mile Island accident revealed flaws in the industry’s approach toward communications. Several factors severely damaged industry’s credibility: a sense of invincibility, arrogance and a failure to respond accurately and quickly. In the years that followed, the industry pooled its experience and refined processes to respond honestly and effectively during a plant event. The industry also established ongoing programs to demystify nuclear plants, opening visitor centers, conducting plant tours and providing continual information to the media about plant operations.

Following a 1994 event involving a stuck fuel assembly at one United States plant, the company allowed media complete access to the plant; this helped maintain credibility in the face of such an event. Yet the industry has continued to learn how the failure to provide open, immediate information can erode credibility. Such was the case with a scenario in 2002 related to reactor vessel head corrosion. Again, in 2006, events related to the leaking of tritium into groundwater near plant sites illustrated that the public will react negatively if not informed promptly.

The United States industry is taking additional actions today to ensure that all operators respect the need for transparency. An industry wide task force on community relations and incidence response continues to advance proven approaches toward open, honest nuclear communications.

This conference has undertaken the noble task of addressing the issue of transparency in nuclear regulation. I am certainly honoured to provide a perspective from the United States' nuclear plant operators on the subject.

Yet, I suggest to you that our purpose here is greater. While achieving transparency is indeed a challenge, I propose to you that the real issue is how to make transparency a fundamental part of the way we do business – a core competency.

Why? Because if we are not transparent in our plant operations and our regulatory approaches, how can we possibly expect to earn and retain the trust of our communities, our customers, the financial community and our policymakers? Without transparency, how can we possibly expect to gain stakeholder confidence in our ability to operate our plants safely? How can we possibly gain the support we need to build the next generation of plants that so many of the world's political, business and environmental leaders say we desperately need?

What, then, are we really trying to accomplish?

Put simply, transparency means we communicate to our constituents *openly* and *honestly*, and we do so as soon as we have credible information. This means that in many scenarios, we must display our best human qualities *first* – our ability to empathize, our compassion, our understanding – and our technical expertise *second*. Risk communication literature is replete with case studies on the value of making a personal connection with your audience and establishing your credibility before communicating information. In communicating about nuclear energy, we must understand that the public's *perception* of a risk is just as valid as the actual risk. We must make nuclear technology familiar to the public, using terms the average citizen understands. And above all, we must learn how to establish and maintain a critical element: *trust*.

Incorporating these principles and making them part of our core competency takes substantial time and effort. Transparency doesn't simply spring forth, fully formed, out of a single management directive. All levels of a nuclear organisation must understand the values associated with it, and both training and day-to-day work processes are critical components. This requires dedication and commitment. It is no easy task. Yet our experience in the United States has taught us clearly that applying the principles of transparency is not optional; it is essential.

My intent today is four-fold.

- I will recount experiences in the United States that have taught us how *not* to communicate about nuclear energy.
- I will illustrate how the industry successfully applied these lessons learned to subsequent events.
- I will discuss how more recent events have reaffirmed the need for transparency.
- And I will review ongoing efforts by the United States industry to strengthen the core principles of transparency.

I will begin with the key event that launched the wholesale reassessment of the nuclear energy industry in the United States: the Three Mile Island accident in 1979. I need not recount the remarkable transformation that has occurred in nuclear power plant operations since then. I need only

point out that average capacity factors today among United States reactors remain at or near 90% – performance levels that were unthinkable in 1979.

The whole idea of transparency also was virtually unheard of in 1979. We need only review how officials responded to the public after the Three Mile Island accident. They chose to say nothing at all for long periods of time. Their tone was arrogant, and they conveyed a sense of their own invincibility. They spoke in obtuse terms the public couldn't understand. I once heard a presentation by a TIME magazine reporter who covered the accident. He said that during a press conference, engineers talked about plant "evolutions." He thought at the time that this was a term used only in biology class.

Given their silence, industry executives surrendered their spokesperson role to others, including the regulator and the media. The result was that the industry also surrendered its credibility and lost the public's confidence.

A reporter in the local community at the time created more panic by inadvertently releasing false information about the effects of radiation from the plant. After the fact, he discovered the source for his information was incorrect. Years later, he said he had heard so many contradictory statements, he had decided to believe his source.

In Three Mile Island's wake, the industry took aggressive steps to correct these problems. It joined forces and concertedly began sharing operating experience through the Institute of Nuclear Power Operations, and it evaluated its progress to ensure that the industry was, in fact, implementing needed changes.

The changes made in communications and public outreach were dramatic. Our regulator and the industry established protocols for emergency notifications. The industry dramatically improved response times for inquiries. It provided the media access to the plant immediately in the wake of plant events.

And the industry strengthened its outreach programs in local communities. It began reaching out to the media and briefing them on plant issues. It established community advisory groups, which are still active at many plants today. It established plant tours and sponsored other kinds of community events that fostered involvement and openness.

Today, at each of Exelon's 10 reactor sites in the United States, local citizens can hear an annual presentation summarizing operation of the plant for the year. Exelon, like many companies, aggressively supports employee volunteerism and involvement in the community. They budget funds for charitable contributions, and they provide monthly reports to the community media.

Did the industry learn its lesson from Three Mile Island? Major events in subsequent years demonstrate that it indeed has.

In 1986, a steam pipe rupture at Virginia's Surry plant killed four men and led to the declaration of a site area emergency. The company acted fast to get information out about the accident. And reporters were given immediate access to the plant.

Similarly, ten years later in 1996, TV crews were allowed inside the containment building following an event involving a stuck fuel assembly at Arizona's Palo Verde plant. In fact, reporters were able to broadcast live from the containment building.

These successes clearly demonstrated that the United States industry had learned it must be diligent in practicing the principles of transparency. In 2002, the company FirstEnergy discovered serious reactor vessel head corrosion at its Davis-Besse plant in Ohio. This led to extensive evaluation and review by the regulator and the industry alike. They sought to identify why previous inspections had not detected the corrosion.

Fortunately, the company had maintained ongoing outreach to communities near the Davis-Besse plant for many years. Surveys showed that while the public was angry and disappointed, overall levels of support for the plant remained strong. However, the media approach to the corrosion discovery indicated that plant operators needed to adhere to yet higher communications standards. Reporters expected great detail about technical issues, which called for close interaction with engineers. They also demanded information immediately, quickly obtaining documents on the issue from the Nuclear Regulatory Commission's Web site.

The industry responded to these events with comprehensive actions. It formed a task force of industry executives to investigate the condition of plant components and systems and developed a broad range of programs that remain in place today. That effort included a communications plan to relay information about the industry program to the Nuclear Regulatory Commission, members of the United States Congress and the financial community.

In late 2005, the industry again confronted another challenge to its policy of transparency. At the Braidwood plant in Illinois, monitoring by the industry detected elevated levels of tritium in groundwater near the plant. These elevated levels resulted from releases in 1998 and 2000. The company did not report the leaks when they occurred, since they did not exceed regulatory limits. Then in late 2005, when the company discovered the impact of these releases on the groundwater, it fully disclosed the situation to local and state officials and to the media.

"Why didn't you tell us about the releases when they occurred?" the local citizens asked. Many residents near the plant thought the company was not communicating honestly and openly about the situation. Among some, fears erupted about immediate risks to health.

What should a company do in such a circumstance? Some professionals believed that the leaks required no public notification, as they were within regulatory limits. But is that acceptable when transparency is the goal?

Initial news coverage showed that Exelon took the appropriate steps. They apologized, accepted responsibility and committed to resolve problems with leaking tritium. The company launched a series of activities to establish immediate transparency. This included Web-based information, face-to-face communications with residents, and public meetings to provide information and access to experts who could discuss the issue.

Yet the company did not entirely escape damage to its credibility, and the issue continued to fester among local citizens and the media. The company reiterated its commitment to fixing the problems.

The United States industry again consolidated its approach, forming a new task force on groundwater issues, putting forth the principle that all environmental releases of any type were to be shared with the public and media, irrespective of regulatory requirements.

In addition, the industry established a new executive-level community relations and incident response task force. Through that task force, every nuclear plant site in the country is reviewing its

community outreach efforts to ensure it is providing continual, current information about plant operations. And while initial surveys show that such community outreach is generally well-done across the United States, “adequate” programs are not good enough. Having strong public outreach programs at only a portion of our plants is not enough. One mishandled event at a single facility can affect all of our plants. It could affect the industry in Japan and other nations as well. That is why NEI is leading an effort to build the same level of excellence in community outreach at *all* plants in the United States.

Clearly, the need for transparency extends to all levels of the industry and to regulators. Open communication among employees is essential. Sharing honest feedback – even bad news – is essential. Apologies alone are insufficient. Acting on feedback and sharing good practices with the industry at large is of paramount importance.

With 16 companies and consortia now pursuing more than 30 new reactors in the United States, sustaining transparency is critically important. What, then, should our approach toward transparency be in the future?

There has been some discussion in the United States about how best to engage the public in the licensing and oversight of nuclear power plants. Three former chairmen of the Nuclear Regulatory Commission have aggressively defended the agency’s past public involvement process in the administration of the regulatory process for its licensees. They cite extensive changes in plant security after the terrorist acts of September 11, 2001, as an example – an effort that widely engaged stakeholders and required major investment by licensees.

Whether old licensing decisions must undergo new public scrutiny remains to be seen. It is, however, incumbent on the agency to present the rationale behind earlier decisions in an open, transparent manner such that the public indeed has confidence in those decisions – clearly the agency has done that. The public record on past decisions is fully accessible, as former NRC chairmen point out, and the agency has taken measures such as full disclosure of information on its reactor oversight process on the NRC’s public Web site.

Indeed, we all must maintain our commitment to maintaining transparency. Richard Edelman, president and chief executive officer of the international public relations firm Edelman, points out that the public no longer expects to get sound information from a company’s CEO or even from a single company spokesperson. The public receives its information through multiple sources today and makes its own judgments about credibility.

Edelman reminds us that a photograph, captured on a cell phone, conveyed Saddam Hussein’s execution worldwide. And we don’t necessarily go to the editorial pages of a printed newspaper to gauge opinion anymore. We go to chat rooms, Web blogs or even look to a text message on our cell phones.

What, then, is the new order of business? I agree with Edelman’s assessment that companies must recognize this new environment as an opportunity to change the way they do business. Continuous, transparent – and even passionate – communications is central to success.

The watchwords for our future are “credibility” and “trust.” And the trust we earn must be a longstanding, abiding trust through *all* channels of modern communication – print media, Blogs, cell phones or other electronic media.

My vision for this industry is that trust and credibility – open, honest and transparent communications – will be our legacy. These qualities will become part of our fundamental way of doing business – an industry-wide core competency. We’ve made great strides, but we have not fully realized that goal.

Shinichi Suzuki, the famous violinist and teacher, introduced millions of children worldwide to the violin through his “Suzuki” method. He believed any child, in the right environment, could learn music. He was right.

“Knowledge is not skill,” he said. “Knowledge plus ten thousand is skill.”

We, too, can emulate Mr. Suzuki’s example. We can indeed make transparency in nuclear communications understood and practiced by an entire industry. This is no small task. But we can do it. Thank you.

PUBLIC TRUST AND BETTER COMMUNICATION IS STILL NEEDED

Mr. Hong Sup Cho

*Environment Correspondent,
The Hankyoreh Daily Newspaper, Republic of Korea*

Abstract

Korean nuclear regulatory agency (KINS) has recently changed its “safety philosophy”: The final goal of nuclear safety should be achievement of psychological and emotional security of people rather than simple attainment of engineering safety targets. This significant progress is not widely known for public. But, its new attitude was confirmed when a nuclear reactor for research purpose, which was located in a metropolitan city, leaked a small amount of radioactive materials in 2005. The agency focused on the fact itself that radioactive materials were released into environment although its amount of radioactivity was negligible from engineering perspective. Does this mean that “science-technology centrism” which has widely pervaded nuclear circle begin to collapse from the regulatory agency?

There has been certain degree of advancement in openness of information, increasing transparency, communication efforts toward public and local people. However, it should be noted that regulatory activity has not attained enough trust from public. Four points are pointed out for regulatory agency to get further people’s trust.

First, nuclear agency’s institutional independence is still uncertain. The Ministry of Science and Technology, which is in charge of nuclear safety by controlling KINS, at the same time promotes nuclear industry by managing nuclear R&D activities. Cultural aspects should also be noted. People tend to regard regulatory agency as ‘friends’ of nuclear

Second, regulatory activities are passive and not preventive in many cases. It is needed to make people convince that the regulatory agency defend their interest first when it competes with the interest of industry.

Third, communication with public is lacking. Even transparent procedure and openness of information may result in limiting public access if its content and meaning are not fully communicated.

Fourth, knowing more about media is needed. Understanding news production processes may contribute to avoiding sensational and dramatic exaggeration in reporting nuclear related news.

What media expect from nuclear regulator regarding transparency

Introduction

It seems that Korean nuclear regulatory agency (MOST and KINS) has recently changed its “safety philosophy”: The final goal of nuclear safety regulation is the achievement of psychological and emotional security of people rather than simple attainment of engineering safety targets. This significant progress is not widely known to the public. But, its new attitude was confirmed when a nuclear research reactor located in a metropolitan city, leaked a small amount of radioactive materials in 2005. The agency focused on the fact itself that radioactive materials were released into environment although the amount of radioactivity was negligible from engineering perspective. Does this mean that “science-technology centered approach” which has widely pervaded nuclear circle has begun to collapse from the regulatory agency? There has been certain degree of advancement in openness of information, increasing transparency, communication efforts toward the public and local residents. However, it appears that regulatory activity has not attained enough trust from the public. A recent survey by KINS shows that about 85% of local residents near nuclear power plants in Korea are concerned about possible nuclear accidents and that they trust civil groups more than governmental institutions or government ministries. Furthermore, the level of recognition of KINS as the nuclear regulatory agency remains less than 30%.

It is widely understood that communication to the public, openness and transparency, and the public trust in the regulatory agency are closely related. Among them, transparency becomes more significant as digital and information technologies are developing rapidly. Through the internet, every citizen could become media disseminating their own version of opinions and news to the whole society. This provides regulatory agency with great opportunity, and challenge at the same time, to get the public’s trust.

Transparency in cultural context

Context of transparency

The purpose of nuclear regulation is to secure safety of nuclear facilities to the level of social acceptance. Given this, regulators should stand for taxpayers rather than nuclear industry. Obviously nuclear industry and regulator recognize that it is impossible to carry out nuclear programme without public acceptance and understanding. Numerous measures including widening public participation and transparency have been implemented in this regard. However, it seems that negative perception toward nuclear energy among the general public has not been improved substantially.

There are several reasons to be noted. First, institutional independence of the regulatory agency has not yet accomplished. The Ministry of Science and Technology, which is in charge of nuclear safety promotes nuclear industry by managing nuclear R & D activities. Many people understand the ministry as a strong supporter of the nuclear industry from the beginning of nuclear era in Korea. Second, cultural aspects should also be noted. People tend to regard regulatory agency as “friends” of nuclear industry based on simple observations that they use same “language”, know each other well, and work in the same neighborhood. For them, the regulator is a member of the “nuclear family”.

Transparency is an essential element for achieving public trust. However, transparency alone may not bring about trust because the social and cultural context in which the regulatory agency is located also affects people’s perception.

Quantity and quality of openness

For journalists dealing with nuclear issues, the more information regulator provides, the better. In Korea, it is possible to download from relevant websites the most of reports on current safety issues reviewed and analysed by related committees and experts, reports on investigation of incidents/accidents etc. Yet, with this information it is hard for journalists to write articles meeting the taste of the public, not to mention editor. More information does not always guarantee better communication. First, much information provided by the regulator is difficult to understand because of engineering terminology and nuclear jargons. If transparent procedure and openness limit public access, then it may end up with one-sided transparency. Second, the regulatory agency appears to be reluctant to give explanation or elucidate meaning on the incident/accident, which are some ongoing issues. This may help to prevent misinterpretation by journalists however it may push them away toward more firm and extreme sources of NGOs.

Actually, openness implies that information provider is ready to accept different ideas and opinions so that it could be changed accordingly. When the regulator implies that its activities are perfect, in other words, there are no mistakes and uncertainties included, then the public may ask for “zero risk”. Yet, if the regulator tries to get public understanding while admitting its limitation and uncertainties, then people may be ready to share responsibility. Safety from engineering sense alone does not build public confidence on nuclear facilities.

“Risk” of transparency

Regulators seem to be afraid of being too much transparent: released information could cause anxiety among the public and opponents might politically misuse it. However, it could be argued that the adverse effects of “over-transparency” are limited only to the regulators in charge, and the public would be benefited from it. The public seldom falls in a panic when they are candidly informed. On the contrary, people are more likely to overestimate the risk if information is not provided sufficiently. The same is true for journalists. If they get information not through official channel but from whistle blowers they tend to take it more seriously. Exposed to this kind of reports, the public may be more frightened than in the case of normal release.

As transparency is increased, journalists now receive various kinds of press releases promptly and in an accurate and complete form. It is not sufficient yet. Transparency should not be limited to finalized documents and reports. It should allow journalists to “view” the risk-assessing and decision-making processes within the regulatory agency. This may bring about exposure of weakness of the organization, and uncertainty and limitation of investigations. Would this aggravate public anxiety and distrust on nuclear? Or would it provide people with chances to understand and participate further in nuclear issues? The lessons from recent environmental saga such as GM food, mad cow disease, and avian influenza tell us that the latter would be true. If regulators fear of being blamed and exposed to weakness, they may lose public support as well as transparency in real sense.

Understanding the media

Media is not a simple channel through which information provided by the source flows to the public. Nor does it reflect the intention of the source intact. Media constitute social events through complex processes of judgment and negotiation by setting the agenda. Understanding news production processes may contribute to avoiding sensational and dramatic exaggeration in reporting nuclear related news.

Conclusion

Transparency is an essential element for attaining public confidence. However, it cannot be independent of social and cultural context. This means that advancing transparency alone is not sufficient for social acceptance of nuclear energy.

For journalists, quality rather than quantity is important as far as transparency is concerned. Information needs to be not only accurate but also easily understood and complete. In this regard, information with explanation should be released rather than in the form of raw materials. Further, regulator should not pretend that he is free from defects. Admitting uncertainties and limitations is the starting point where the public understands and share responsibility with the regulator.

Regulators need not be afraid of being too much transparent as the public benefits from it in the long run. This may also prevent sensational reports and make people panicleless about nuclear events. In order to enhance transparency deeper, it is required to understand the media better.

References

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EXPECTATIONS OF STAKEHOLDERS VOICE FROM THE LOCATION

Mr. Hiroo Shinada

Mayor of Kariwa Village, Japan

Abstract

In this presentation, the expectations for transparency of the nuclear regulatory authorities are discussed from the viewpoint of a local government, where the nuclear power station is sited.

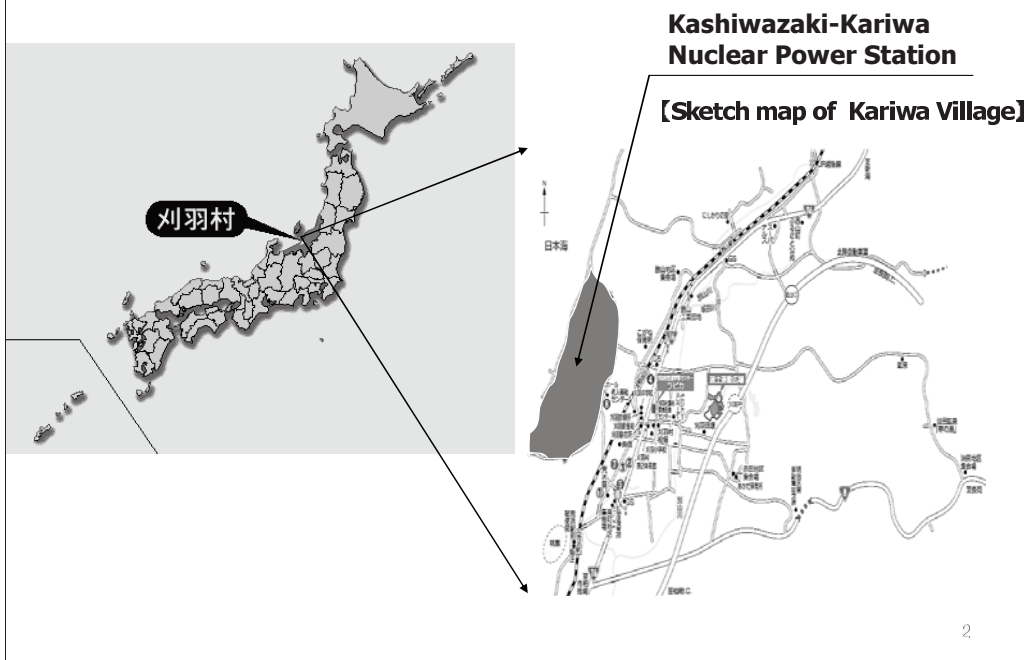
Since the problems yet to be solved by the local government, are visibly existent right in front of our eyes, both the policy information and the technical information required for that purpose must be altogether trustworthy. Consequently, established transparency of the regulatory authorities is also an extremely important point for the local government.

To begin with, the outline of Kariwa-mura, Kariwa-gun, Niigata Prefecture, where I myself serve as village mayor, the overview of the Kashiwazaki-Kariwa Nuclear Power Station and the relationship between Kariwa-mura and the power station are explained.

Next in place, the peculiarity of Kariwa-mura involved in the nuclear power station will be mentioned after defining the transparency required in relation to the regulations in order to clarify in what respect we are seeking accountability from the regulatory authorities.

In conclusion, the roles of the local residents (local government) involved in the nuclear safety regulations are discussed introducing the “Regional Association for Securing the Transparency of Kashiwazaki Nuclear Power Station” as an sure example to the solution for securing transparency.


Kariwa Village (Geographical Location and the Power Station)



Current Status of Kariwa Village

- Population: 4,998 (April, 2007)
- Total area: 26.28 km²
- Main industry:
 - Agriculture
 - Regional specialties
Brand-name rice: Koshihikari,
Peaches grown on sand dunes;
 - Industrial products
 - Valve, Metal processing,
and **Electric Power**






Kashiwazaki-Kariwa Nuclear Power Station (Summary)

- Start of construction work (KK1):
November, 1978
- Start of operation (KK7): July, 1997
- Scale of the power generation: 8.212
million kW
(1.1 million kW x 5; 1.356 million kW x 2)

4



How Kariwa Village was Involved in Determining the Location of the Power Station

- June, 1969: Kariwa Village Council resolved to invite
the power station.
- October, 1983: Niigata Prefecture, Kashiwazaki City
and Kariwa Village entered into a safety agreement
with Tokyo Electric Power Company.
- March, 1999: Kariwa Village gave prior consent to the
pluthermal project.
- May, 2001: The Kariwa Village residents' poll was
held concerning the decision of whether or not to
accept the pluthermal project.

5



The Kariwa Village residents' poll concerning the acceptance of the pluthermal project (Result)

- Percent Turnout of Voting Age Population : 88.1%
- Number of Valid Turnout : 3,605
 - Number of Voting 'Yes' : 1,533(42.5%)
 - Number of Voting 'No' : 1,925(53.4%)
 - Remain Undecided : 13
 - Number of Invalid Turnout : 134

6



Transparency of Regulation and Reliability of Information

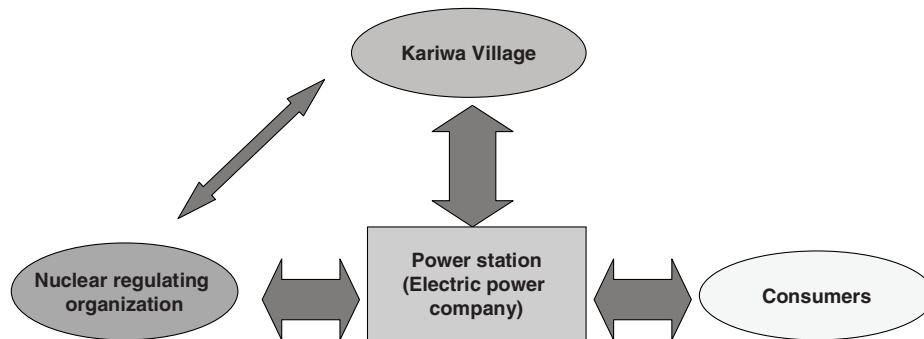
Information should be ...

- All information should be disclosed as a rule.
- Information should be understandable for us.
- We need dependable information.
 - If we could verify it, better... ..

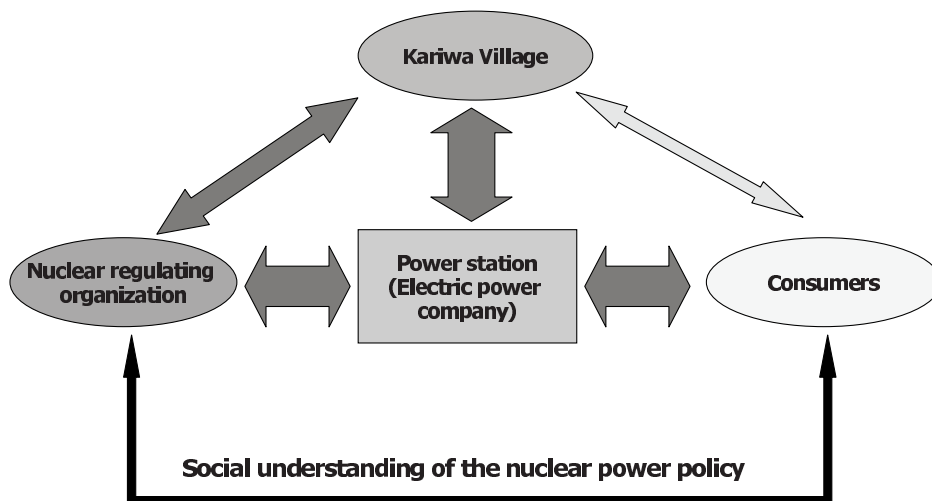
Trustworthy information : Brought by Reliable Person

7

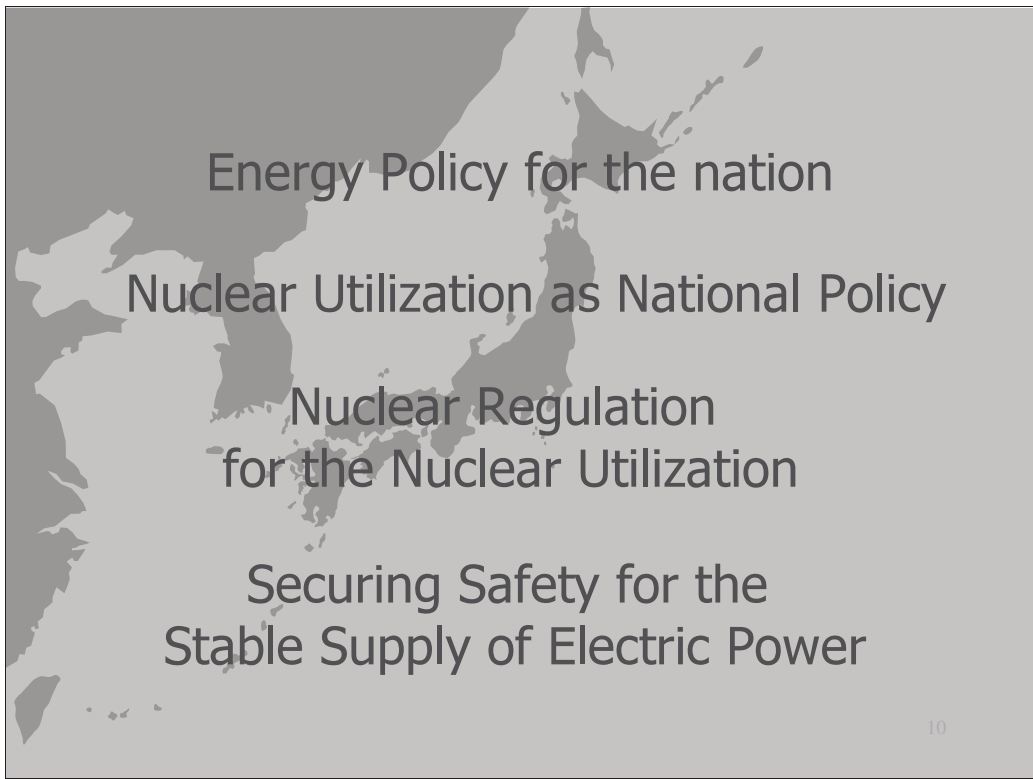
Uniqueness of Kariwa Village (Local Residents ≠ Consumers)



8



9



SESSION 3

CONDITIONS FOR ENSURING TRANSPARENCY

Chair: Ms. Marie-Pierre Comets, Commissioner, ASN

Co-Chair: Mr. Anders Jörle, SKI

CHAIR'S KEYNOTE SPEECH
TRANSPARENCY – THE FRENCH NEW FRAMEWORK

Ms. Marie-Pierre Comets
Commissioner, ASN, France



Introduction

June 13th 2006 → the act on « Transparency and Security in the Nuclear Field » (TSN act):

- Definition of transparency
- 4 points in the field of transparency

Definition of transparency

« Transparency in the nuclear field consists in the set of provisions adopted to ensure the public's right to reliable and accessible information on nuclear security. »

Nuclear security includes nuclear safety and radiation protection.





1- ASN independent administrative authority

Information mission strengthened by the law.

ASN publishes on its website (www.asn.fr):

- results of inspections, follow-up letters to the licensees
- information on reactor outages
- incident and accident reports
- drafts of general regulatory texts for consultation

- commission advices and decisions
- summary report of EPR technical examination

The transparency of Nuclear Regulatory Activities , OECD/NEA Workshop Tokyo, 22-24 May 2007

3



2- Local information committees

They work around the nuclear facilities; they have:

- to monitor the impact of these facilities
- to inform the population

They can have consultancy services, studies and analyses performed. Supported by ASN.

The law → legal status

- financial resources
- generalizes them at all sites
- enlarges their task.

The transparency of Nuclear Regulatory Activities , OECD/NEA Workshop Tokyo, 22-24 May 2007

4



3- High Committee for Transparency and Information on Nuclear Security

- will replace and reform the High Council for Nuclear Safety and Information
- thinktank, debate and information body on a **national level**
- Can give opinions, organize adversarial debates and is warrant for the access to information and for the transparency principles established by the TSN act.

In 2006, the High Council for Nuclear Safety and Information
→ 6 meetings: organization of the supervision of nuclear safety and radiation protection, bill related to transparency and security in the nuclear field, bill related to sustainable management of radioactive materials and wastes, ...

The transparency of Nuclear Regulatory Activities , OECD/NEA Workshop Tokyo, 22-24 May 2007

5



4- Information held by the licensee

Until last June 13th, any person was entitled to obtain:

- documents held by the administration
- information related to the environment held by the public authorities

COMPLETELY NEW.

Any person is entitled to obtain from the licensee of a basic nuclear installation:

- information on the risks related to ionising radiations that can result from this activity
- information on the safety and radiation protection measures taken

under certain conditions of public security and intellectual property rights.

SPECIFIC TO THE NUCLEAR FIELD.

The transparency of Nuclear Regulatory Activities , OECD/NEA Workshop Tokyo, 22-24 May 2007

6

OVERVIEW OF IAEA SAFETY STANDARDS AND INSIGHTS FROM REGULATORY REVIEW SERVICES

Mr. Lingquan Guo

Department of Nuclear Safety and Security, IAEA

Abstract

This presentation will discuss the transparency and openness which are covered by the topics of this workshop.

Safety and protection issues have been taken into consideration on an international level. The IAEA affirmed the importance of safety in its statute more than 40 years ago and has been working ever since towards international harmonization of safety and radiation protection principles. All nuclear technologies are recommended to meet minimum standards of nuclear safety set at the international level by the IAEA. Up to now, transparency and openness which become more and more important for the regulatory bodies to improve their regulatory effectiveness and efficiency are not clearly defined in a systematic way in the IAEA safety standards, but, there are still several documents which give some requirements and suggestions to address this important issues.

First part of my presentation will present the overviews of transparency and openness described in the IAEA safety standards, including legal-binding and non-legal-binding instruments. From top to low level of standards hierarchy, like new Fundamentals, Basic Safety Standards (BSS), General requirements for the regulatory authorities (GS-R-1), INSAG documents, as well as the Technical Document which deals with the communication practices.

It should be noted that GS-R-1 is the basis for IRRS. Its revision already started and we are going to incorporate clear statements regarding Transparency and Openness followed the statements by new Fundamentals.

Transparency and openness issues is considered to be more important part of the Policy Issues in new Integrated Regulatory Review Services (IRRS) being carried out in the member states.

The regulatory policy issues review provides a greater understanding of the regulatory issues that may have international policy implications and will assist in addressing specific technical issues relevant to the regulation of nuclear safety and radiation protection. The regulatory policy issues review process creates a forum for the exchange of experience and lessons learned and identify potential solutions and methods that could be applied for solving the regulatory challenges. The regulatory policy issues will be identified after reviewing a broad spectrum of information including, but not limited to, insights resulting from convention activities, international conferences and forum and previous IAEA safety review services. The regulatory policy issues review will be further tailored

to the host country's IRRS mission based on a review the host country's self-assessment and action plan.

My second part is going to provide the workshop the insights from recent IRRS missions, to share the good experience and practices among the participants. Openness and transparency in regulation is essential to encourage continuous improvement of performance and building public confidence. The international community promotes openness through several services. However, finding a proper balance between public availability of information and protection of confidential data remains a challenge. The IRRS missions provide a good opportunity for the member states and experts to discuss the important issues, to share the good practices among member states, to identify the possible improved ways for the regulatory authority in their regulatory system.

IAEA STATUTE (Article III.A.6)

- “To establish or adopt... [in consultation with...] standards of safety for the protection of health and minimization of danger to life and property”
- “...and to provide for the application of these standards”

International Atomic Energy Agency



CATEGORIES OF STANDARDS

Safety Fundamentals

- Set out principles of protection and safety

Safety Requirements

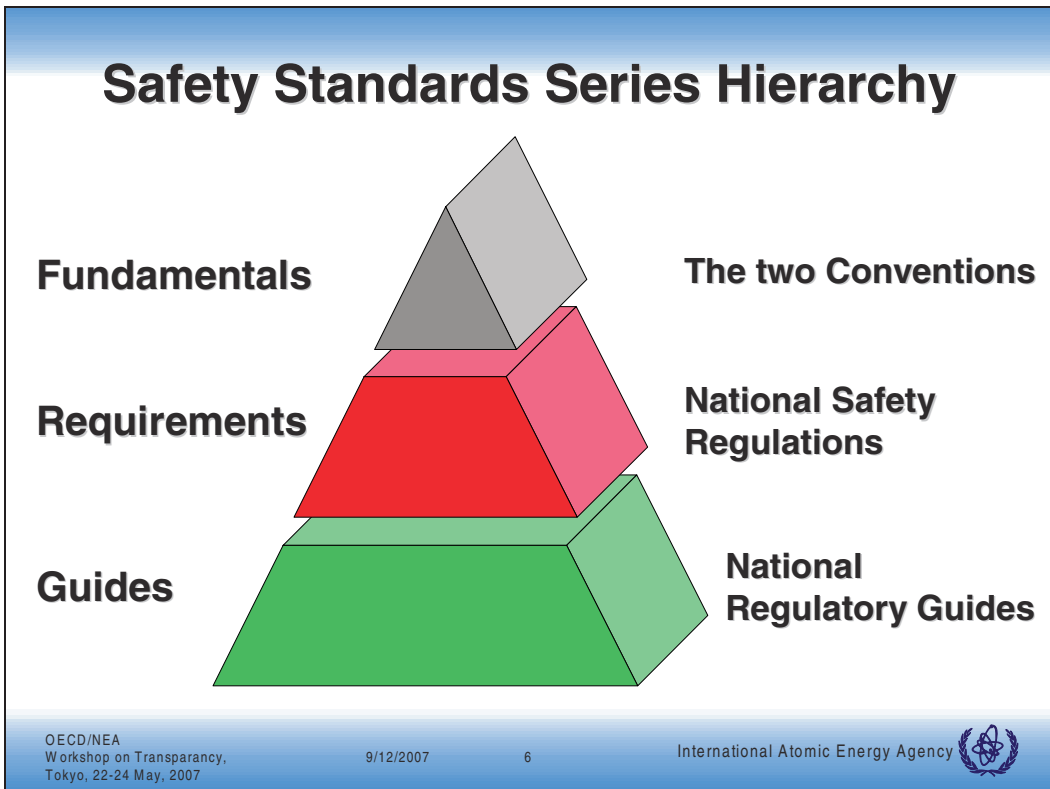
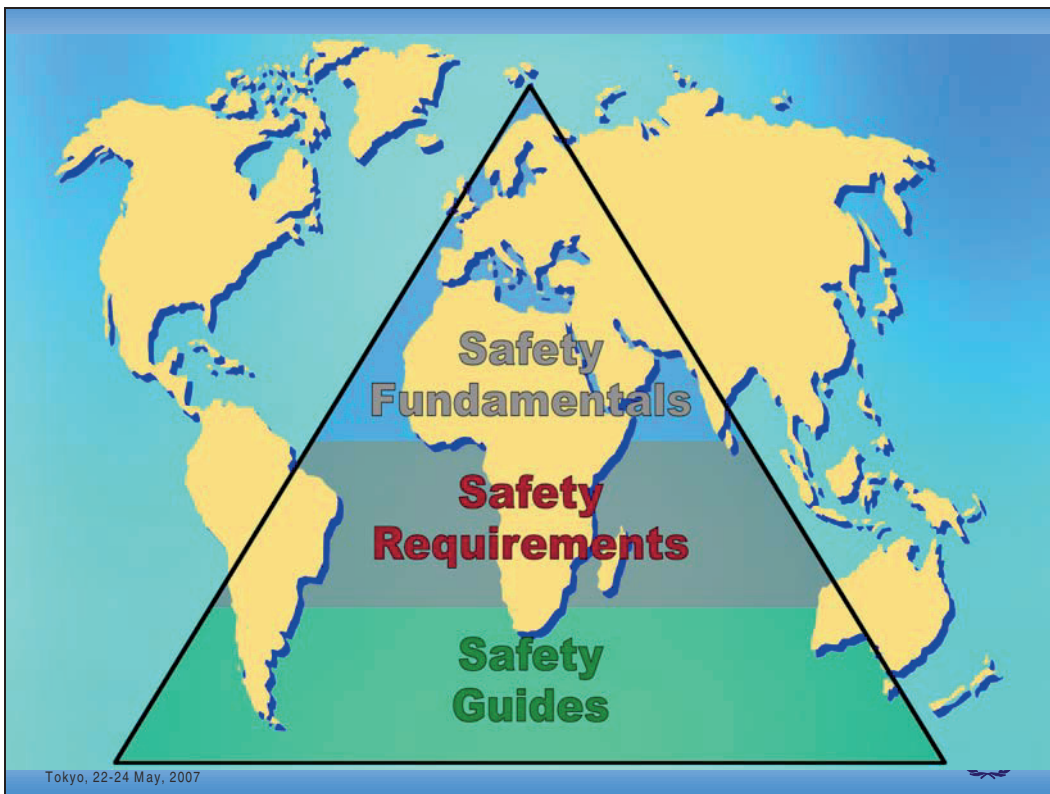
- Establish requirements: what has to be done ('shalls') to apply these principles in meeting objectives

Safety Guides

- Set out recommended ways ('shoulds') of meeting the requirements

International Atomic Energy Agency





Overview of IAEA safety standards

10 Fundamental Safety Principles (SF-1)

Principle 1: Responsibility for safety

Principle 2: Role of government

Principle 3: Leadership and management for safety

Principle 4: Justification of facilities and activities

Principle 5: Optimization of protection

Principle 6: Limitation of risks to individuals

Principle 7: Protection of present and future generations

Principle 8: Prevention of accidents

Principle 9: Emergency preparedness and response

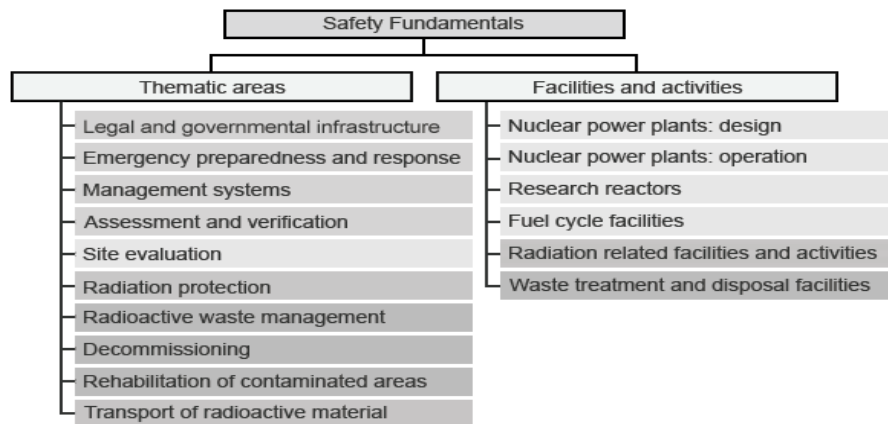
Principle 10: Protective actions to reduce existing or unregulated radiation risks

International Atomic Energy Agency



IAEA Safety Standards

for protecting people and the environment



- General safety (cross-cutting themes)
- Safety of nuclear facilities
- Radiation protection and safety of radiation sources
- Safe management of radioactive waste
- Safe transport of radioactive material

International Atomic Energy Agency



SAFETY FUNDAMENTALS

GENERAL SAFETY REQUIREMENTS

List of chapters:

1. Legal and Regulatory System
2. Leadership and Management of Safety
3. Nuclear and Radiation Safety Technical Provisions and Criteria
4. Integrated Safety Assessment
5. Radioactive Waste Management
6. Decommissioning and Termination of Activities
7. Remediation for Existing Situations
8. Emergency Preparedness and Response

FACILITIES AND ACTIVITIES SPECIFIC SAFETY REQUIREMENTS

A. Nuclear Power Plants

1. Site Evaluation
2. Design
3. Operation

B. Research Reactors

C. Fuel Cycle Facilities

D. Waste Disposal Facilities

E. Facilities and Activities Using Radiation Sources

F. Transport of Radioactive Material

G. Mining and Milling of Radioactive Ores

International Atomic Energy Agency



Overview of IAEA safety standards

Principle 2: Role of Government

An effective legal and governmental framework for safety, including an independent regulatory body, must be established and sustained.

- Set up appropriate means of informing parties in the vicinity, the public and other interested parties, and the information media about the safety aspects (including health and environmental aspects) of facilities and activities and about regulatory processes;
- Consult parties in the vicinity, the public and other interested parties, as appropriate, in an open and inclusive process.

Informing and Consulting

International Atomic Energy Agency



Overview of IAEA safety standards

Safety Requirements

GS-R-1: Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety

The Regulatory Authority:

- shall define how the public and other bodies are involved in the regulatory process;
- to obtain such documents and opinions from private or public organizations or persons as may be necessary and appropriate;
- communicate independently its regulatory requirements, decisions and opinions and their basis to the public;
- make available, to other governmental bodies, national and international organizations, and to the public, information on incidents and abnormal occurrences, and other information, as appropriate;
- liaise and co-ordinate with other governmental or non-governmental bodies having competence in such areas as health and safety, environmental protection, security, and transport of dangerous goods;

International Atomic Energy Agency



Overview of IAEA safety standards

Safety Requirements

Revision of GS-R-1: a CS was held last month in Vienna

FUNCTIONS OF THE REGULATORY BODY

- OVERVIEW
- AUTHORIZATION
- MAINTAINING NATIONAL REGISTERS
- REVIEW AND ASSESSMENT
- INSPECTION
- ENFORCEMENT
- DEVELOPMENT OF REGULATIONS AND GUIDES
- REGULATORY PRINCIPLES AND CRITERIA
- INFORMATION AND PUBLIC COMMUNICATION

International Atomic Energy Agency



Overview of IAEA safety standards

Safety Requirements

Basic Safety Standard (BSS) - IAEA Safety Series No.115

National infrastructures must provide for adequate arrangements to be made to ensure that:

A related responsibility is to set up appropriate means of informing the public, its representatives and the information media about the health and safety aspects of activities involving exposure to radiation and about regulatory processes. This provides information to facilitate the political process of setting national priorities And allocating resources for protection and safety and also helps to make the regulatory process more readily understandable.

International Atomic Energy Agency



Overview of IAEA safety standards

Safety Guide: Organization and Staffing of the Regulatory Body for Nuclear Facilities (No. GS-G-1.1)

PUBLIC INFORMATION

- The regulatory body should be organized to provide public information concerning its activities, both on a regular basis and in relation to abnormal events;
- Information provided to the public should be factual and as objective as possible, reflecting the regulatory body's independence.
- The regulatory body should be as Open as possible while complying with national legislation on confidentiality.
- Public information should be managed by individuals with expertise in the field so as to ensure that the information provided is clear and comprehensible.
- In a large regulatory body, the establishment of a specialized public information unit should be considered.

International Atomic Energy Agency



Overview of IAEA safety standards

INSAG-20 - A report by the International Nuclear Safety Group “STAKEHOLDER INVOLVEMENT IN NUCLEAR ISSUES”

This report has four main purposes:

- to advocate open, transparent, factual, timely, informative and easily understandable multilateral communications among members of society and those who are operating or regulating nuclear facilities or developing a nuclear project;
- to establish that substantive stakeholder communications contribute to the safe operation of nuclear facilities;
- to present the major attributes of an effective communication programme; and
- to discuss ways and means for the efficient and rational involvement of stakeholders in the consideration of nuclear issues.



Overview of IAEA safety standards

INSAG-20 - A report by the International Nuclear Safety Group “STAKEHOLDER INVOLVEMENT IN NUCLEAR ISSUES”

Major contents of this reports:

- SAFETY RELEVANCE OF STAKEHOLDER INVOLVEMENT
- COMMUNICATION WITH STAKEHOLDERS
- PARTICIPATION BY STAKEHOLDERS IN DECISION MAKING PROCESSES
- DOCUMENTATION AND FEEDBACK
- CONCLUSIONS AND RECOMMENDATIONS



Overview of IAEA safety standards

IAEA-TECDOC-1076

*“Communications on nuclear, radiation, transport and waste safety”
- A practical handbook*

OBJECTIVE

This publication is mainly intended to assist those regulatory authorities which need to establish or improve their national programme on communicating nuclear, radiation, transport and waste safety to different audiences, such as to decision makers, the media, the public, the nuclear community and Non-Governmental Organizations.

SCOPE

The scope of this publication covers all forms of communication undertaken by the regulatory Authority concerning nuclear safety, both proactive and reactive communication. Hence it includes both planned, routine communication programmes and communicating in response to events.



Overview of IAEA safety standards

IAEA-TECDOC-1076

*“Communications on nuclear, radiation, transport and waste safety”
- A practical handbook*

- **ROLE OF THE REGULATORY AUTHORITY**
- **KEY MESSAGES TO BE COMMUNICATED**
 - BASIC NUCLEAR SAFETY ELEMENTS
 - CONTROL OF SOURCES OF IONIZING RADIATION
 - PRACTICAL EXAMPLES FOR COMMUNICATING SAFETY



Overview of IAEA safety standards

IAEA-TECDOC-1076

“Communications on nuclear, radiation, transport and waste safety”
- A practical handbook

- **COMMUNICATIONS PROGRAMME ON NUCLEAR SAFETY**

FUNDAMENTALS OF NUCLEAR COMMUNICATIONS
DEVELOPING COMMUNICATIONS OBJECTIVES
IDENTIFYING THE AUDIENCE
CONDUCTING OPINION RESEARCH OF AUDIENCES
DEVELOPING A MANAGEMENT PLAN
EVALUATING THE COMMUNICATIONS PROGRAMME



Insights from NSC 3rd Review Meeting

Observations on Openness and Transparency

11. Contracting Parties agree that openness and transparency with all interested parties are important elements in maintaining confidence and trust in regulatory bodies and in the activities of the operating organizations.
12. Many Contracting Parties reported on good practices, including improved usage of the Internet for near real time communication and transmission of information, as well as for nuclear event databases (e.g., INES) that are open to the public. Others reported on the benefits of instituting low thresholds for informing the general public of information relating to nuclear safety.
13. Many Contracting Parties recognized that it is good practice for National Reports to be available through both the relevant national website of the Contracting Party and the IAEA's website.
14. There was also discussion of the merits of engaging the public, in both technical and licensing processes.



Insights from regulatory review services

- **Integrated Regulatory Review Services (IRRS)**

Visions:

“To have Effective and Sustainable Regulatory Bodies that fully apply IAEA safety standards and lessons learned from Conferences and Review Meetings (conventions) among Senior Regulators”



Insights from regulatory review services

Purpose of IRRS

To enhance the regulatory effectiveness on nuclear and radiation safety by:

- Providing the host country (regulatory body and governmental authorities) with a review of their nuclear and radiation regulatory technical and policy issues;
- Providing the host country (regulatory body and governmental authorities) with an objective evaluation of their nuclear and radiation regulatory practices with respect to international safety standards;
- Contributing to the harmonization of regulatory approaches among Member States



Insights from regulatory review services

Objectives of IRRS

- Promoting sharing of experience and exchange of lessons learned
- Providing key staff at the host country with an opportunity to discuss their practices with reviewers who have experience of other practices in the same field;
- Providing the host country with recommendations and suggestions for improvement;
- Providing other States with information regarding good practices identified in the course of the review; and
- Providing reviewers from States and the IAEA staff with opportunities to broaden their experience and knowledge of their own field.



Integrated Regulatory Review Service Basis for technical regulatory issues (Cont'd)

Part I: Common Requirements

Module I

*Legislative & Governmental
Responsibilities*

*Legislative and statutory
framework
Regulatory body independence
Competence
Resources*

Module II

*Responsibilities & Functions of the
Regulatory Body*

*Defined regulatory activities
Policies, safety principles, criteria
Promotion of regulations and guides
Co-operation with relevant institutions*

Module III

Organization of the Regulatory Body

*General
Staffing & Training
Advisory Bodies
Interfaces with other bodies
Relation with the operator / licensee
International cooperation
Infrastructures*

Part II: Generic Requirements - Regulatory Activities

Module IV

Authorization

*General issues in the
Authorization process
Guidance for the operator on the
format and content of documents
Formal action for granting or
refusal of authorization
Process for amendment, renewal,
suspension or revocation of the
authorization*

Module V

*Review &
Assessment*

*Review and assessment General
issues
Definition of the principles and
criteria of the judgments and
decision process
Compliance of available
information on the activity or
facility with safety objectives,
principles and criteria
Review and assessment
regulatory body programme*

Module VI

Inspection

*Inspection and enforcement -
General issues
Inspection type, inspection
procedures
Inspection findings and
consecutive remedial action
Enforcement actions- graded
approach
Curtailing, suspending,
revoking of authorization
Inspector's competency*

Module VII

*Regulations
& Guides*

*Development of regulation and
guides - General Issues
Feedback and experience
reflected in guides
Feedback from internationally
recognized standards and
recommendations*

Part III: Specific requirements

Module VIII *Management System for Regulatory Body*

Part IV: Thematic Elements



Insights from regulatory review services

Policy issues

Reference material:

- Safety Fundamentals
- Results from the Convention on Nuclear Safety;
- Results from the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management;
- IAEA regulatory and safety conferences and other relevant international meetings and forum;
- IAEA reports on safety issues and trends;
- Results from IAEA review missions



Insights from regulatory review services

Regulatory Policy Issues

- Enhancing the Regulatory Effectiveness and Competence
- Transparency and Openness (Stakeholders inv.)
- Independence (“de jure” & “de facto”...)
- Leadership and Management of Safety
- Regulatory Aspects on Operating Experience Feedback
- Long Term Operation and Ageing of Nuclear Facilities



Insights from regulatory review services

Regulatory Policy Issues

- Licensing New Built – New Technologies
- Regulatory Approaches balance between Deterministic and Probabilistic. Performance based versus Prescriptive
- International Participation and Legal and non-legal binding international instruments
- Harmonization between Nuclear and Radiation Regulations
- Human Resources and Knowledge Management



Insights from regulatory review services

Background

- Openness and transparency in regulation is essential to encourage continuous improvement of performance and building public confidence.
- The international community promotes openness through several services. However, finding a proper balance between public availability of information and protection of confidential data remains a challenge.



Insights from regulatory review services

Key elements

- Strategies for engagement of stakeholders;
- Stakeholder involvement in regulatory decision making;
- The basis for regulatory decisions made available to stakeholders;
- Use of electronic communication, including the internet, for communication to stakeholders;
- Low threshold for informing stakeholders of nuclear and radiation safety related information.



Insights from regulatory review services

Good practices from IRRS missions

France: Full scope of IRRS to ASN:

Strengths:

- A mature, consistent and transparent nuclear regulatory system for Basic Nuclear Installations;
- Information and communications to the public;



Insights from regulatory review services

Good practices from IRRS missions

Japan, IRRS Mission (NISA)

- Preparatory mission (Information meeting): 5 to 8 February, 2007
- Mission: 24 to 30 June, 2007

Transparency and Openness:

- there are several approaches to deal with, including public hearing and public relation
- Basic policies of international cooperation:
 - ▶ Assurance of transparency related to nuclear safety and international accountability;



Insights from regulatory review services

Good practices from IRRS missions

- Transparency and Openness are going to be main issues to be discussed in the future IRRS missions;
- Feed-back from the missions will be considered into the revision process of safety standards;
- New document is needed to guide the Regulatory Authorities in the MSs how to deal with;



Integrated Regulatory Review Service

IRRS Schedule :

- Romania, IRRS January 2006 (Follow-up IRRT and RaSSIA)
- UK, March 2006 (1st Phase) *Next Steps*
- France, November 2006 (Full Scope)
- Australia, Japan, Pakistan, Mexico, 2007
- Spain, Canada, Germany, UK (2nd Phase), 2008
- Russia, US, Sweden, Netherlands, China, Statements of Intent
- Ongoing Requests from Smaller Nuclear Programs

OECD/NEA
Workshop on Transparency,
Tokyo, 22-24 May, 2007

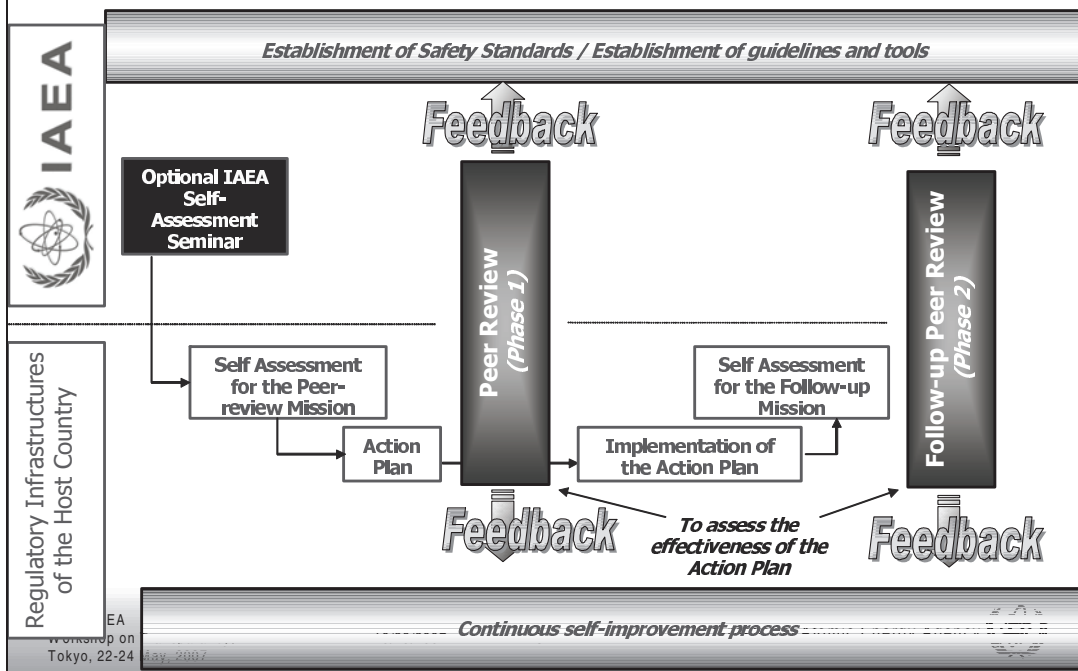
9/12/2007

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International Atomic Energy Agency



Integrated Regulatory Review Service



LEGAL FRAMEWORK TO ENSURE TRANSPARENCY

Mr. Anton Treier

Information Officer, HSK, Switzerland

Abstract

There is a national and an international trend towards administrative transparency. This trend hasn't stopped at the Swiss border. Some cantons of Switzerland have already introduced the transparency principle at the cantonal level. At the federal level, the Swiss Confederation introduced on 1st July 2006 the new Federal "Freedom of Information Act". Also the Swiss Federal Nuclear Safety Inspectorate (HSK) falls under this rule.

Before introduction of this law on transparency, most of the documents of Swiss Federal Administration were treated as confidential. Access rights to official documents were granted only on certain conditions and in special cases. But there is a general interest, that the public should have the possibility to ask to look at the files of the administration. Since years, the administration had no longer been able to hide behind secretiveness. For instance, the introduction of internet brought a lot of transparency. The administration had to explain what sort of job it is actually doing and how it is doing. Also, the media were and are increasing their research for information. In this context, the new law on transparency ("Freedom of Information Act") is rather an evolution than a revolution.


The Freedom of Information Act guarantees the public access to official documents. Most of the documents of the Federal Administration are public. This access can be limited, differentiated or refused in certain cases. That means that the principle of proportionality between private interests and public transparency has to be applied. The real challenge for the authority is the trade off between the public's right to access information and the industrial legitimate efforts to protect industrial and trade secrets.

In the nuclear field, the international principle of transparency has also become an important national principle for Switzerland and HSK. The Swiss Nuclear Energy Act says that "The relevant authorities shall regularly inform the general public about the condition of nuclear facilities and any matters pertaining to nuclear goods and radioactive waste. They shall inform the general public of any special occurrences." Although this act has only become effective on 1st February 2005, it reflects the practice under the former Atomic Law.

In the field of energy and especially nuclear energy, a lot of people urge for knowledge. They also want to be sure that the use of nuclear energy is really safe, and they want to know how the licensees and the safety authorities are working. The HSK, as the Swiss nuclear safety authority, is aware of the great public interest about nuclear matters and nuclear safety. This is one reason that

HSK pays attention to an active, open and comprehensive information. Active information is a good prevention of rumors and false report.

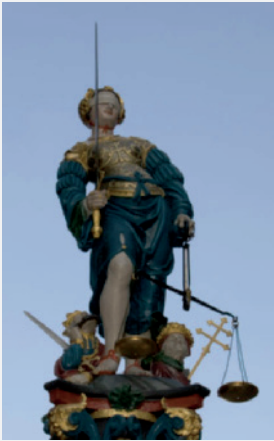
In the middle of the 1990s, HSK had established his own information service and had engaged an information officer. At the same time, HSK also had introduced – as one of the first Swiss authorities – its own website in the internet. In the meantime, most of the offices and institutions of the Swiss Confederation have their own website in the internet. HSK intends that its information is correct, objective, transparent, open, timely and in plain language. HSK publishes media releases, technical reports and annual reports concerning nuclear safety and radiological protection. Further on, HSK gives interviews, answers to individual questions of the public, of students or NGOs and answers to questions of the Swiss parliament. HSK takes part in media meetings, public events, special hearings etc. Technical reports, annual reports, expertises of HSK, regulatory guidelines etc. are also available on the website of HSK (www.hsk.ch) in the internet.

 Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Confederation

Swiss Federal Nuclear
Safety Inspectorate HSK

Legal tasks of HSK

- **Regulatory guidelines**
- **Safety reports**
- **License approvals**
- **Licensing of personnel**
- **Inspections**
- **Assessments of events**
- **Emergency preparedness**
- **Information**



A. Treier, May 2007

Folie 2



Swiss acts > public information

Nuclear Energy Act (February 2005)

- Oversight becomes more formal
- Article 74: Regularly, the authority has to inform the public about nuclear safety. HSK also informs about special incidents.

Nuclear Energy Ordinance (February 2005)

- Article 76: Duty of HSK to deliver quick and open information on nuclear incidents and accidents.

Freedom of Information Act (July 2006)

- Federal Act on administrative transparency
- Public access to all documents (except security related)
- Active demand for information



Act on Administrative Transparency

- **July 1st 2006, the Swiss Federation had introduced the “Freedom of Information Act” on the national level.**
- **This act guarantees the public access to official documents, with some exceptions.**
- **Most of the documents of the Federal Administration will be public, including documents of HSK.**
- **More administrative transparency on the cantonal and national level.**



Act on Administrative Transparency

- **HSK belongs to the Swiss federal administration and therefore it is under the new rule.**
- **HSK implements the act in order to best meet the individual needs of the stakeholders.**
- **Disclosure of public documents upon request.**
- **Protecting industrial and trade secrecy.**
- **Protecting security related information.**



Scope of persons having access

- **The act on transparency allows every person having access to official documents.**
- **Everybody can consult official documents and can get information on their contents.
("everybody" means Swiss and foreign people, whether it is an individual or an institution)**
- **Access to one means access to all.**



Scope of documents

- **Documents which are written by an authority or in the hands of an authority.
They must be official / registered.**
- **Access to official documents means not at all full access.**
- **Not under the rule of openness:**
 - documents from different law courts
 - documents with personal data
 - unofficial documents / for personal use
 - documents used for commercial reasons
 - not yet finished documents



Limitations

The access to official documents can be limited, differentiated or refused in certain cases.

In other words:

The principle of proportionality between private interests and public transparency has to be applied.



Exceptions

Examples of exceptions with importance for HSK:

- **Industrial and trade secrecy**
- **Professional, business and manufacturing secrets**
- **Security related documents**
- **Free formation of opinion**
- **Impact on concrete measures of the authority**
- **Impact on international relations and relations between the confederation and the cantons**



Procedure of access

Some questions when HSK is proving access:

- **Is it a document HSK has the lead? Leading authority?**
- **Is it an official document?**
- **Has the document already been published?**
- **Is the document offering a basis for decisions not yet made?**
- **Is it a juridical document?**
- **Does the document include information under the data protection legislation?**
- **Are private or public interests more important?**



Our audience

- **Federal government in Bern**
- **Federal commissions**
- **Parliament**
- **Governments of the cantons**
- **Local authorities**
- **Licensees of nuclear installations**
- **Research institutes**
- **Media and public**
- **Organizations, NGOs**
- **Authorities of foreign countries**



CREATING INTERNAL CULTURE TO ENSURE TRANSPARENCY

Ms. Elizabeth Hayden

Information Officer, NRC, United States

Abstract

Among the keys to achieving public confidence, is openness and transparency to those one serves. As a Federal regulator entrusted by the American people to protect them against the hazards of radiation, the U.S. Nuclear Regulatory Commission recognizes the need for openness and a strong “safety culture and climate” where there is a “safety-first focus” by its employees as well as those it regulates. For the NRC and nuclear industry, safety culture is typically the assembly of characteristics and attitudes in organisations and individuals which establishes nuclear safety as an overriding priority. Strong safety cultures include conservative decision making, strict adherence to procedures, questioning attitudes, and an environment in which employees feel free to raise safety concerns.

A strong internal safety culture that is transparent to others helps the NRC to be more effective in carrying out its safety job to protect the public through its oversight of the nation’s nuclear power plants and other civilian uses of nuclear energy. Creating the appropriate environment or culture and communicating NRC’s contribution to safety can affect employee and ultimately public perceptions about the agency’s commitment to safety in its daily activities. Where there is openness and transparency, trust and confidence are likely to follow.

To assess and measure its safety culture, the NRC commissioned three independent surveys to be performed in conjunction with some use of focus groups over an 8-year period. The results identified strengths and weakness, and were compared to previous survey results as well as to other U.S. government organisations and national benchmarks. Perhaps the most surprising results came from the 2002 survey that found a third of NRC employees questioned the agency’s commitment to safety, and almost half of the staff said that they did not feel it was safe to speak up in the agency. Some changes at the agency were made and the 2005 survey results showed increased improvements in internal communications, strategic plans, employee engagement, recruitment, leadership skill expectations, handling employee concerns, and reinforcement of the agency’s safety mission.

One of the keys to achieving public confidence is to be open and transparent with a strong safety culture where there is a “safety-first focus” by the regulator’s employees. Creating the appropriate internal safety environment or culture and communicating a regulator’s contributions to safety can affect both employee and public perceptions about the agency’s commitment to safety. Where openness and transparency is established within an organisation, it can result in a more cohesive and effective organisation to carry out a common mission – a safety mission. Also, greater trust and confidence are likely to follow. After all, if we expect licensees to assess their safety culture, we need to do the same at the Nuclear Regulatory Commission. I would like to share with you the results of a series of safety culture and climate surveys undertaken at the NRC to assess its culture and make improvements where needed.

Overview

By way of an overview, I’ll briefly describe the NRC’s mission, provide background on the safety culture surveys conducted at the NRC, improvements made from the 2002 survey, results from the 2005 survey, and future plans for improvement.

NRC is the Federal agency entrusted by the American people to protect them and the environment from the hazards of radiation through regulation of the commercial nuclear industry.

NRC was created by the U.S. Congress in 1974 as an independent agency. It is headed by a five-member Commission one of which is appointed Chairman by the President of the United States. This morning you heard from one of our Commissioners – Commissioner Jaczko.

The agency employs about 3 300 people at its headquarters and four regional offices plus full time “resident” inspectors assigned to 65 nuclear power plant sites and three fuel facilities. We oversee 104 operating nuclear power plants and thousands of nuclear materials licensees in medicine, academia and research and development.

Safety culture

Safety Culture often refers to having a safety-first focus. It reflects an organisation’s mission, characteristics, and policies along with the beliefs and actions of its individual members, which establish and support nuclear safety as the overriding priority. A strong safety culture includes:

- conservative, realistic decision making;
- strict adherence to procedures that are current and applicable;
- a questioning attitude – such as for inspectors to delve deeply into situations and not just accept things on face value or as they may appear; and
- a “safety-conscious work environment” where employees are encouraged to raise safety concerns without fear of retaliation and management responds effectively to those concerns.

To understand and measure the strengths and weaknesses of NRC’s safety culture, the Office of the Inspector General – an independent office that evaluates NRC’s programs for efficiency and effectiveness – conducted assessments of the NRC’s organisational characteristics and the attitudes and behaviors of its management and staff.

Safety culture & climate survey

Since 1998, the OIG and its contractor have conducted triennial surveys to:

- measure the NRC's safety culture and climate,
- compare the results to previous surveys of NRC employees, and
- compare results to the U.S. Government and the National norm.

The surveys included random interviews and focus groups with employees and were administered to all NRC employees. Not until the 2002 survey did the NRC fully recognize the need to improve its safety culture.

Results of 2002 survey

Results of the 2002 survey identified four key areas for improvement:

- 1) Internal communications;
- 2) Management leadership skills;
- 3) Employee concerns; and
- 4) Importance of NRC's safety mission

Results of the 2002 survey were posted on NRC's website and we were criticized in the media for the relatively low percentage of employees that felt safety was the highest priority at the agency. A third of NRC employees questioned the agency's commitment to safety and almost half of the staff said that they did not feel it was safe to speak up in the agency. This was an eye-opener and unacceptable to us. We had our work cut out for us to meet this challenge and improve our safety culture before the next survey.

Improving communications

With communication being a key attribute of the safety culture, we took a number of actions and made improvements to internal communications so that it would be clear or transparent to employees the paramount importance of NRC's safety mission. Specifically we:

- Established a Communications Council, with representatives from most offices, that meets monthly to plan, discuss, coordinate and implement best practices for internal communications. Results of each meeting and progress on initiatives are posted to the agency's internal website for employees. The meetings have served as an effective forum to test new ideas and launch new products and have served as a conduit to inform staff of new guidance or programs.
- Launched the NRC Reporter – the agency's first weekly electronic newsletter with highlights of the agency's latest activities of the Commission, management, and staff as well as internal news about upcoming special events for employees.

- Issued electronic newsletters from senior managers in each program office to keep its employees informed of office-wide news and information to help them do their jobs.
- Created electronic messages called “EDO updates” from the Executive Director for Operations or “to convey and reinforce the importance of internal communications and safety practices and to praise staff work. This importance of safety has been emphasized as a personal priority by the Chairman and the EDO on a number of occasions.
- Redesigned the internal website to be more useful to the staff; and we’ve added daily news stories of NRC interest on this website for all employees to keep up with the latest news.
- Established a photo gallery in our office building hallways showing NRC employees of all levels at work.
- Started a branding initiative to give employees a sense of identity, to convey our safety mission consistently and establish a standard for easy identification in our publications, documents and Web site.
- Enhanced communication training for different types and levels of staff. This covered training for media interviews, public outreach meetings, speeches, as well as writing documents in plain English.

Management of leadership skill expectations

To identify leadership skill expectations, we began emphasizing succession planning and leadership attributes and designated the Executive Director for Operations as the advocate for effective leadership. We aligned the Senior Executive Service performance plans with competencies recognized for Federal executives, managers and supervisors. In addition, we required leadership training for new managers to ensure leaders at all levels acquire and improve the competencies appropriate for their organizational responsibilities. We also designated a Leadership Development Program Manager to oversee and coordinate the agency’s management excellence goals and strategies, and held more frequent leadership development programs for potential managers.

Handling employee concerns

We emphasized a number of existing avenues for handling employee concerns and strengthened the Differing Professional Opinion (DPO) Program. This program encourages open and honest communication so that employee concerns can be addressed early in the process. We established an internal web page where employees can voice their concerns about a variety of areas – including professional concerns, safety concerns, personnel concerns, and union, management or equal employment opportunity concerns.

In addition, we revised the DPO program which encourages employees to speak up and make differing views known. Managers reinforced this message in speeches, newsletters, meetings, memoranda, and other communication vehicles. There is confidentiality and protection from retaliation. Further, awards are to be considered for those who put forth safety concerns.

Reinforcing safety mission

We’ve worked to reinforce the NRC’s safety mission by taking a number of specific actions that include emphasizing safety in internal memos, electronic newsletters, meetings and management

updates to all employees through agency-wide e-mail announcements. We've linked safety mission and organisational values to employees' jobs and what they do every day. Each supervisor is expected to discuss with each of his or her employees the importance of their job to the NRC's safety mission.

We are implementing a branding effort to reinforce our safety mission on various agency documents and the website. We've held more face-to-face meetings between managers and staff to communicate important messages, meeting summaries, rationale for agency decisions and expectations from the Chairman and other senior managers. Employees are reminded of safety-first expectations at annual all-employee meetings, in speeches and other venues.

2005 survey

The next survey was administered in mid-September 2005 in a similar fashion as the 2002 survey. However, this time we marketed the survey more aggressively and advertised the importance of everyone's participation in e-mail messages, posters around the office, and in meetings. Also, we communicated that management listened to the employee concerns in the 2002 survey and took action. With management's commitment to continuing improvements, we believed this was another factor that could help boost participation in the 2005 survey.

We stressed in our messages that all employees contribute to safety either directly or indirectly. As a result of a more proactive approach, 70% of the NRC staff completed the 2005 survey. This was one of the highest participation rates the OIG contractor had ever seen on any survey.

2005 survey results

The 2005 safety culture and climate survey results showed improvements in nearly all of the 19 categories in the survey and scores were generally above the U.S. National Norm. The largest gains were in communication, agency mission and strategic planning, employee engagement, recruiting, developing and retaining staff, and management leadership.

Those categories we have set out to improve are workload and stress, knowledge transfer from retiring employees, and the DPO program. We are working hard on a knowledge management program particularly to capture and document existing employees' knowledge and to capture information and insights from retiring employees before they leave. Although the DPO program still carries a stigma of not enhancing one's career, we are exploring a less formal non-concurrence program.

The survey results were briefed to all agency employees and made available to the public on the NRC's external website. We believe this approach for the survey as well as the results go a long way towards agency openness and transparency.

Planned improvements

Some ongoing and planned improvements based on the results of the 2005 survey include:

- Establishing an internal communications position in major offices to help implement communication improvements;
- Designating specific internal working groups in offices and regions to guide improvements, including the development and use of communication plans;

- Branding all NRC publications and products such as that done for the Web site and this slide presentation, business cards, and official stationery with a new logo and tagline: *Protecting People and the Environment*;
- Continuing improvements to communications training to target certain groups of employee needs;
- Exploring establishment of an electronic agency-wide calendar with key meeting and event information available to all employees; and
- Conducting additional surveys.

Summary

In closing, I would like to point out that senior management support is crucial to creating a strong internal safety culture that clearly emphasizes to employees that safety is first in what we say and do. We believe that if agency commitment to safety is perceived favorably by the public, it helps us carry out our mission more effectively to protect people and the environment.

The NRC that exists today will likely be a different place in a few years. Although our mission will not change, for the first time in about 25 years, the agency expects to license about two dozen new nuclear plants beginning this fall. We expect to hire about 1 000 more staff, many of them younger than the majority of the existing workforce. We have already begun to re-design, re-think, and re-engineer many of the processes and activities that we have been practicing for the last 30 years. But it is a challenge that we welcome.

Best places to work

Lastly, I would be remiss if I didn't toot the agency's horn a bit in telling you that the NRC was recently rated the #1 large Federal agency for the Best Places to Work. We must be doing something right but we recognize that we'll have to continue to work hard to keep this high rating.

Thank you and I would be happy to answer your questions.

“SECRET OF RADIATION” – JOURNALIST TRAINING COURSE AT STUK

Mr. Jarmo Lehtinen, Mr. Risto Isaksson
Information Officers, STUK, Finland

Abstract

Why training is necessary?

- Radiation issues are complicated for journalists.
- Important to have smooth cooperation with journalist.
- STUK will be known as leading radiation and nuclear expert in Finland.

Vision and goals

- 100 trained journalists in 10 years.
- Quality of journalism improves as STUK gives assistance for journalist to succeed in their work.
- Courses organized 2004, 2005, 2006 and 2007 (one course six days), 60 journalists participated.

Co-operation brings results

- Co-operation with five journalist organisations: Finnish Journalist Union and Journalist organisations in the fields of Technology, Science, Medicine and Environment.
- Joint meetings with journalist organisations were organized before the decision about establishing the course was made; the organisations had real influence to the outcome.
- Other cooperation partners: Fortum, TVO, Posiva, SKI, Oskarshamn NPP, Leningrad NPP, Kola NPP, Forsmark NPP.

Contents of the course

- Basic information about radiation.
- Health effects.
- Radiation threats of Finland.
- Safety of NPPs.
- Fifth NPP to Finland.
- Nuclear waste.
- Nuclear materials.
- The use of radiation for industrial purposes.
- The use of radiation for medical purposes.
- Radioactivity in food.
- Radon.
- Uv-radiation.
- Radiation of mobile phones.

Study trips: not only information

- Successful course consists not only of information, even emotional experiences are important.
- Course 1: Loviisa NPP, Oskarshamn NPP, SKB.
- Course 2: Olkiluoto NPP, Posiva, Sillamäe, Leningrad NPP.
- Course 3: Loviisa NPP, Rovaniemi laboratory, Kola NPP.
- Course 4: Olkiluoto NPP, Posiva, Forsmark NPP.

Positive feedback

| | <i>2004</i> | <i>2005</i> | <i>2006</i> |
|------------------|-------------|-------------|-------------|
| The topics..... | 4,6 | 4,7 | 4,2 |
| Arrangement..... | 4,3 | 4,4 | 4,4 |
| Materials..... | 4,1 | 4,4 | 4,2 |

Scale 1–5

Why training is necessary

- Radiation issues are complicated for journalists
- Important to have smooth cooperation with journalist
- STUK will be known as leading radiation and nuclear expert in Finland

Vision and goals

- 100 trained journalists in 10 years
- Quality of journalism improves as STUK gives assistance for journalist to succeed in their work
- Courses organized 2004, 2005, 2006 and 2007 (one course six days), 60 journalists participated

Cooperation brings results

- Cooperation with five journalist organisations: Finnish Journalist Union and Journalist organisations in the fields of Technology, Science, Medicine and Environment
- Joint meetings with journalist organisations were organized before the decision about establishing the course was made; the organisations had real influence to the outcome
- Other cooperation partners: Fortum, TVO, Posiva, SKI, Oskarshamn NPP, Leningrad NPP, Kola NPP, Forsmark NPP

Contents of the course

- Basic information about radiation
- Health effects
- Radiation threats of Finland
- Safety of NPP's
- Fifth NPP to Finland
- Nuclear waste
- Nuclear materials
- The use of radiation for industrial purposes
- The use of radiation for medical purposes
- Radioactivity in food
- Radon
- UV-radiation
- Radiation of mobile phones

Study trips: not only information

- Successful course consists not only of information, even emotional experiences are important
- Course 1: Loviisa NPP, Oskarshamn NPP, SKB
- Course 2: Olkiluoto NPP, Posiva, Sillamäe, Leningrad NPP
- Course 3: Loviisa NPP, Rovaniemi laboratory, Kola NPP
- Course 4: Olkiluoto NPP, Posiva, Forsmark NPP

Positive feedback

| | 2004 | 2005 | 2006 | 2007 |
|---------------|------|------|------|------|
| • The topics | 4,6 | 4,7 | 4,2 | 4,6 |
| • Arrangement | 4,3 | 4,4 | 4,4 | 4,3 |
| • Materials | 4,1 | 4,4 | 4,2 | 4,6 |

Scale 1–5

THE CANADIAN NUCLEAR SAFETY COMMISSION'S PUBLIC HEARING AND MEETING PROCESS

Mr. Marc Leblanc

Commission Secretary, CNSC, Canada

Abstract

Abstract of oral presentation

The oral presentation to be given in the context of Session 3 of the workshop will address the following points:

- Explanation of Commission structure and its role as a tribunal;
- The rationale for public participation through a tribunal;
- Increased participation through the public hearing and meeting process;
- Stakeholder reactions: applause and criticism;
- Stakeholder participation: the future.

Background paper on hearing process at CNSC

The following background paper is not a synopsis of the oral presentation. Instead, it provides information on the Commission and its public hearing and meeting process as a foundation for the discussion on the practical considerations of increased transparency through public participation.

A. Introduction

The Canadian Nuclear Safety Commission (CNSC) regulates the use of nuclear energy and materials to protect health, safety, security and the environment and to respect Canada's international commitments on the peaceful use of nuclear energy.

The Canadian Nuclear Safety Commission can be best described as the watchdog over the use of nuclear energy and materials in Canada. It is one of only a few nuclear regulators in the world that will involve the public in the conduct of hearings and meetings. The CNSC is an independent agency of the Government of Canada and operates in a transparent manner. Its operations are open to formal public scrutiny. Increased transparency was a key building block of the new *Nuclear Safety and Control Act* which came into force in May 2000.

There are two parts to the CNSC: the Commission Tribunal and the CNSC staff who provides advice to the Commission. The CNSC staff is a technically-oriented organisation of approximately 600 employees responsible for regulating radiological health, safety, security and the environmental

aspects of over 3 500 licensees engaged in uranium mining, nuclear power generation, and the industrial, medical and research applications of nuclear energy throughout Canada. The CNSC is also responsible for specific aspects of Canada's international commitments regarding non-proliferation of nuclear weapons.

The Commission Tribunal (usually referred to simply as the Commission) is an independent quasi-judicial administrative tribunal consisting of up to seven Commission Members appointed by the Governor in Council (Canadian federal government). The Commission takes into account the views, concerns and opinions of interested parties and intervenors when establishing regulatory policy and making licensing decisions. For licensing matters, CNSC staff prepares recommendations for Members of the Commission, who make the final independent decisions after hearing from the interested parties (the applicant and public intervenors). Matters before the tribunal and therefore heard in the context of public hearings are those involving nuclear generating stations, uranium mines and mills, nuclear waste facilities and research reactors. The bulk of licensing activities, pertaining for example to nuclear substances and import/export, has however been delegated by the tribunal to CNSC staff.

The Commission has the power to make regulations, with the approval of the Governor in Council (Cabinet), on a wide variety of subjects related to nuclear activity. These range from the development, production and use of nuclear energy to the protection of nuclear workers to measures to ensure the maintenance of national security and compliance with Canada's international obligations. Commission Members are kept informed about the regulatory direction of the CNSC and relevant developments that may lead to regulatory change in a number of ways. Members are exposed to current issues and concerns through their participation in public hearings and licensing decisions, and access to regulatory documentation and press clippings on nuclear-related matters. CNSC staff reports to the Commission, at public meetings, on significant developments in relation to a particular situation affecting one or more licensees in Canada. Staff also reports periodically at public meetings on the performance of individual major licensees.

B. Historical notes

On May 31, 2000, the CNSC replaced the Atomic Energy Control Board (AECB) when the new *Nuclear and Safety Control Act* (NSCA) replaced the *Atomic Energy Control Act* (AECA).

The AECA was enacted in 1946. Since that time, there have been significant changes in the extent and nature of nuclear activities in Canada and throughout the world, and in society's expectations of government regulation of nuclear activity. The focus of the regulatory activities of the AECB evolved to include the health, safety and environmental consequences of nuclear activities, while still continuing to control security aspects. The AECA itself, however, did not mention health, safety or environmental protection. These considerations now are clearly provided for in the NSCA.

By the mid-1970s, a general trend for governments to act more openly and transparently had emerged. Recognizing that public confidence relied in part on the public observing how the AECB carried out its regulatory responsibilities, in particular its licensing decisions, the AECB instituted a practice of conducting Meetings of the Board in public.

In 1983, the AECB issued its first "Policy and Procedures on Representations and Appearances", which formalized that AECB practice. The policy stated that the AECB "was prepared" to receive written statements of views from an applicant, a licensee, members of the public and special interest groups, and, "in certain cases", to grant appearances before the President and CNSC staff, or at Meetings of the Board. This approach evolved over time to the point where public meetings,

advertised in advance and involving the participation of a number of interested parties, became the norm. By August 1997, the AECB promoted the objective that interested parties and intervenors had an opportunity to express their views and to provide input into matters presented to the AECB.

The NSCA goes a step further and requires that the Commission hold public hearings for most licensing matters that come before it for decision. In addition, the NSCA allows the Commission to hold public hearings on any other matter within its jurisdiction if the Commission determines it is in the public interest to do so. This is in addition to the meetings of the Commission which are also generally open to the public. Note that *in camera* or closed sessions may be held on sensitive issues, such as security matters.

C. The hearing process

1. General principles

When licensing nuclear activities, the Commission makes a decision which will impact primarily on particular individuals or companies. In so doing, the Commission is generally subject to the legal principles of fairness, some of which are reflected in specific provisions of the NSCA and of the Rules of Procedure which apply to these proceedings.

The NSCA requires that before the Commission makes a licensing decision, it must give the applicant/licensee an “opportunity to be heard”. In the interest of fairness, the Commission must give the person most affected by the decision the opportunity to present their views to it before making its decision. With respect to certain decisions made by the Commission, the NSCA imposes an added obligation to hold a “public hearing”. Before making a licensing decision under subsection 24(2) or where it would be in the public interest to do so, the Commission must hold a public hearing. A public hearing is a hearing structured so as to give affected parties and in most cases interested members of the public a reasonable opportunity to make submissions – in writing and/or orally – in relation to the matter to be decided by the Commission. Public hearings are a highly visible component of the work of the Commission. The Commission holds approximately 30 public hearings each year, aggregated in about 20 hearing days.

2. Public participation

The Rules of Procedure facilitate and encourage active participation by members of the public. In addition to notifying the applicant or licensee, the Commission gives 60 days advance notice of a public hearing in a manner which is likely to come to the attention of interested members of the public. As a general rule, the notice of public hearing is posted on the CNSC website and is also published in newspapers serving the area in which the facility is located. The notice supplies information on the duration of the hearing (one or two days), its purpose, dates, time, place and the deadlines for filing documents prior to the hearing.

Participants may attend in person to make their presentations or have their written submissions considered in a public forum. Members of the public may also attend and observe the proceedings without further formality. In order to participate actively in the hearing, interested persons must seek and be granted the status of an intervenor by the Commission. Public hearings are usually well attended by members of the public and of the media, and may include a number of intervenors (e.g., individuals, unions, employees, community and environmental groups). The Commission has a public hearing room in Ottawa but may from time to time conduct hearings at different locations across the country, to provide a greater opportunity for the public to participate in or observe its proceedings. The Commission has been using, where appropriate, teleconferencing and videoconferencing in the

conduct of proceedings, and plans to continue its move toward a greater use of available technologies. For example, the Commission is now video web casting some of its proceedings where matters have significant public interest.

In accordance with the Rules of Procedure, a public hearing before the Commission may take place on one day or on two non-consecutive days. Most major decisions are made following a 2-day public hearing. On Day 1 of a two-day public hearing, the applicant or licensee and CNSC staff make their presentations to the Commission. On Day 2 of the public hearing, the applicant and CNSC staff may provide supplemental information, and intervenors make their presentations. Day 1 and Day 2 may be held several months apart, but are typically 60 days apart. On an average public hearing day, Commission Members will sit to hear a number of matters. Some of these may be at the Day 1 stage; others will be at the Day 2 stage. Following Day 2 of a public hearing, the Commission deliberates and makes its decision on the matter. If the hearing takes place on a single day, the decision is made following the hearing.

A member of the public that wishes to make a submission is called an “intervenor”. A request for permission to intervene, attaching submissions, must be filed with the Commission at least 30 days before the *second* hearing day of a two-day hearing. For a one-day hearing, an alternative filing date for intervenors will be established and publicized via a public notice. It will be later than the filing date for the applicant and staff. The intervenors will have an opportunity to review the materials filed by the applicant and CNSC staff and, for a two-day hearing, to attend or review the transcripts of the first day of the hearing. The deadlines for filing interventions also ensures that the applicant and CNSC staff have an adequate opportunity to review and prepare to respond to the intervention during the hearing. On the second hearing day, the intervenors present their submissions orally and/or in written form.

An intervention request must describe the interest of the person making the request in the matter or the expertise or information possessed by the person that may be useful to the Commission. The Commission may permit persons who demonstrate the requisite interest, expertise or knowledge to participate in the proceedings in the manner and to the extent that the Commission considers will enable it to determine the matter before it in a fair, informal and expeditious way. It has not been the practice of the Commission to deny or challenge a person requesting to intervene, although it is open for it to do so. The person would then have to demonstrate the requisite interest, expertise or knowledge, following which the Commission would rule on whether he or she would be allowed to participate. Customarily, the Commission has welcomed the input of intervenors but will manage their participation in an appropriate manner. A guideline of 10 minutes per oral presentation is employed for intervenors.

The CNSC has published an information document entitled “Canadian Nuclear Safety Commission Public Hearings on Licensing Matters” (INFO-0715) which reviews the procedures at a public hearing for the benefit of those who may wish to attend or participate.

3. Fair, informal and expeditious process

The Commission procedures are less formal than court hearings. In a traditional court hearing, the two opposing parties, through their counsel, present evidence (documents, written and oral testimony received under oath), conduct cross-examination of each others’ witnesses and then deliver final argument.

Although various participants in a public hearing before the Commission on a licensing matter may take conflicting positions on some issues, there are not two opposing parties in the strict sense.

Lawyers rarely appear before the Commission. Customarily, a public hearing before the Commission does not involve the presentation of formal evidence under oath, followed by argument, in a two-step process. The Commission has the power to require sworn testimony, written or oral, and to allow cross-examination, if necessary. The Commission could also require the production of documents and summon witnesses before it to testify, but it does not normally do so. However, the Commission will informally, from time to time, invite representatives from other government departments or organisations to be in attendance to respond to questions from members in their areas of jurisdiction. The Commission Members rely on written submissions, hear oral presentations based on those submissions, and ask questions to complete the evidence and argumentation pertaining to each matter. The applicant and any intervenors may question each other and any witnesses, but only with the permission of the Commission and in the manner that the Commission may determine. Questioning is controlled by the Commission through the presiding Member. The guiding principle, which is stated in the NSCA, is that all proceedings before the Commission shall be dealt with as informally and expeditiously as the circumstances and considerations of fairness permit.

D. The meeting process

Decisions taken by the Commission at meetings are regulatory, policy or administrative decisions. The Commission powers exercised at meetings involve making rules, in the form of regulations, or establishing policies, in the form of regulatory documents, which apply generally to the regulated community. The Commission may also deal at its meetings with other administrative or information matters which assist the Commission in fulfilling its mandate. For example, the decision by the Commission to delegate some licensing powers to designated officers (CNSC staff) was taken at a meeting.

The Commission holds public meetings, approximately 7-8 times a year, normally immediately following the close of public hearings. Members of the public will usually observe these proceedings, rather than participate. However, in an effort to increase public participation, the Commission has allowed, in the Fall 2004, public participation in a mid-term status report on the performance of a licensee, where the public was allowed to intervene, in writing or orally, in a session held in Ottawa but with video-conferencing facilities in their community.

E. Conclusion

Public participation in Commission proceedings has ensured that the views of persons interested in nuclear energy facilities are heard and factored into the decisions of the Commission. Public proceedings have also served to increase the effectiveness, visibility and credibility of the Commission in its role as watchdog over the use of nuclear energy and materials in Canada. Transparency of the licensing process is a cornerstone of the CNSC regulatory framework.



INTRODUCTION



Scope of the presentation:

- Brief overview of the structure of the CNSC and the role of its tribunal
- Rationale for public participation
- Hearing and meeting process
- Stakeholder satisfaction and concerns with public participation
- Public participation: the future

Canada



The Commission



- Mission: Regulating use of nuclear energy and materials to:
 - protect health, safety, security and the environment: and
 - To respect Canada's international commitments on the peaceful use of nuclear energy
- Vision: To be one of the best nuclear regulators in the world

Canada



The Canadian Nuclear Safety Commission



- More than 600 employees
- Head office in Ottawa. Regional offices and site offices across Canada
- Reports to Parliament through Minister of NRCan
- CNSC is divided into 2 components:
 - * Staff component (the « CNSC staff »)
 - * Tribunal component (the « Commission »)



The CNSC Staff Component



- Managed by Executive Committee
- President is CEO
- Approx. 600 employees (head office – sites – regional offices)
- 4 areas (Operations – Corporate Services – Regulatory Affairs)
- Legal Services + Audit and Evaluation + Secretariat
- 5 activities areas: Regulatory Framework
 - Licensing / Certification
 - Compliance
 - Domestic and International Cooperation
 - Outreach



The Tribunal Component



- Quasi-judicial administrative tribunal
- 7 Permanent Commission Members
- 1 full-time Member (President)
- 6 part-time Members (80-90 days/yr)
- Supported by Secretariat
- Independent of CNSC staff
- Independent of Minister, Department, nuclear industry, public interest groups, etc.
- 2 roles: (1) make regulations and approve regulatory policy;
(2) issue licences to significant nuclear facilities (power reactors - research reactors - uranium mines - nuclear waste facilities), after public hearings

Canada



The Commission as a Tribunal



- Akin to a court since can compel evidence and renders binding decisions. In fact, is a court of record.
- Key decision drivers are safety, health, security and the environment
- Nuclear policy, promotion and economics are not our business
- Most visible function is to licence nuclear activities and render environmental assessment decisions

Canada



Role of Secretariat



- Supports all activities of the tribunal component
- Receives, distributes and controls all documentation
- Schedules the hearings and meetings and publishes agendas, etc.
- Assists members in drafting Records of Proceeding and minutes of meetings
- Manages communications related to tribunal's business
- Provides technical support and advice

Canada



Hearing vs. Meeting



- Commission business is mostly conducted in hearings and meetings
- Licensing decisions are conducted at hearings, unless delegated to D.O.s
- Meetings deal mostly with information items, such as Significant Development Reports, status or interim reports on the industry or specific licensees, and reports on matters of special interest
- Most hearings and meetings are public, and take place in the CNSC Hearing Room. Some are held outside Ottawa to increase accessibility
- Some hearings or meetings can be conducted in private if there are security or other confidentiality issues

Canada



Rationale for Public Participation



- Increase transparency of licensing process of major nuclear facilities through public participation at hearings
- Increase transparency of key information and non-licensing matters through public meetings
- Is a fundamental part of the Outreach initiative of the CNSC
- Ensure more balanced, fairer and transparent process through involvement of interested participants and availability of submissions to other participants and the public
- Ensure Commission Members render informed decisions

Canada



Who Are the Stakeholders?



- Participants: Applicant or Intervenor
- Intervenor: Non Governmental Organizations (Greenpeace, etc.), other government departments, municipalities, unions, individuals, etc.

Canada



Opportunity to be Heard



- Based on statutory requirements (Act and Rules)
- Act provides specific licences requiring a public hearing
- Commission can always hold public hearing or provide opportunity to be heard if in the public interest
- TEST: Fair, informal and expeditious manner

Canada



Hearing Process



- There are one-day and two-day hearings (depending on complexity and anticipated public interest)
- Most licensing matters are two-day hearings
- First day (Day 1) is to hear applicant and staff
- Second day (Day 2) is approximately 45-60 days later and is to hear public intervenors

Canada



Hearing Process (cont.)



Notice of hearing published by Secretariat
at least 60 days before hearing

- * Internet
- * Regional newspapers
- * Standard mailing lists

Agenda also published on Internet.

- Applicant and staff submit CMD at least 30 days before hearing (Day 1 and 2)
- Transcripts of Day 1 available to all within 72 hours

Canada



Hearing Process



- Written intervention from intervenors at least 30 days before Day 2 (must state if wish to present orally). Sent to all participants. Available to others only upon request.
- Transcripts of Day 2 available to all within 72 hours after the hearing day
- Decision published within 3-4 weeks after Day 2
 - * Published on Internet
 - * Sent to all participants

Canada



Procedural Provisions



- Filing of documents documents (e-filing in future)
- Official languages
- Confidentiality
- Commission may allow participants to question one another and any witnesses
- Record must be kept (application; notice; filed evidence; decision and reasons for decision; transcript)

Canada



Meeting Process



- Similar to hearings
- Few decision items
- Typically information items
- Currently very limited public participation
- Meeting is public

Canada



Stakeholder Satisfaction: Pros



- Access to documentation through various means
- Internet
- Stakeholders participate in most hearings
- Increased opportunity to participate and voice opinion
- More transparent proceedings (more media coverage)
- Records of proceedings, including Reasons for decision, are very comprehensive
- Fast access to transcripts

Canada



Stakeholder Satisfaction: Criticisms



- Access to notices and other documents (CMDs)
- Timing too short to file interventions (intervenors)
- Process too long (applicants)
- 10-minute allocation for oral presentation too short (intervenors)
- Location of hearings / meetings (mostly in Ottawa – 2 or 3 outside hearings per year)

Canada



Stakeholder Participation: The Future



- Automation of hearings (e-hearings)
- More documents on-line
- Improved video-conferencing
- Improved Web cast
- Public participation on interim reports

Canada



Stakeholder Participation: The Future (cont.)



- All CMDs on Internet (since 1946)
- Satisfaction survey
- Benchmarking
- Performance indicators

Canada



Conclusion



- Discussion
- Questions



Key Terminology



- **CMD:** Commission Member Document (prepared by applicant-licensee, staff and intervenors)
- **NSCA:** *Nuclear Safety and Control Act*
- **CEAA:** *Canadian Environmental Assessment Act*
- **NLA:** *Nuclear Liability Act*
- **By-laws:** Regulations governing the meetings
- **Rules of Procedure:** Regulations governing the hearings
- **One-day hearings:** Hearing conducted in one single day
- **Two-day hearings:** Day 1 and Day 2

SESSION 4

**CHANGING REGULATORY PRACTICES
FOR ENSURING TRANSPARENCY**

Chair: Dr. Won Ky Shin, President, KINS

Co-Chair: Ms. Laurel Herwig, CNSC

CHAIR'S KEYNOTE SPEECH
LESSONS LEARNT ON STAKEHOLDER INVOLVEMENT
ON DECISION-MAKING PROCESS

Dr. Won Ky Shin
President, KINS, Republic of Korea

Transparency issues have emerged in recent years as a challenge to nuclear regulators. Beginning debates on public communication, meetings and workshops have been held on public trust and confidence so far and it is on the transparency this time.

Transparency, as defined and discussed yesterday, means literally that something can be seen through. The definition tells us that it is, more actively, to provide the public with factual information about regulatory activities, and to respond promptly to “the public’s right to know” about the information acquired or developed by regulatory organisation.

The public trust, public confidence, public participation and transparency are those “key words” that have appeared recently and approached us when we are talking about public communication issues. Recent research tells us that trust or confidence consists of competence, consistency in words and behaviours, openness, sharing values and ideas(or goals) of trustees and trustee’s care and consideration of trusters, mostly the general public. I think openness or transparency is, in this regards, one of the key elements to build public confidence in regulator that acts as major role in achieving regulatory goal. Regulatory goal, now under active discussions among regulators, is to assure that nuclear safety is maintained as “acceptable” level. It is also related to the public satisfaction with nuclear safety accomplished. Based on this, we believe that if we are open and transparent, the public will more likely trust regulators and have confidence in us accordingly.

Regarding the transparency policy, more frequently, we have been asked a question: “how transparent is transparent enough?” Though transparency is universally admired in principle, its implementation may conflict with other societal values or different interests.

Measures and practices to enhance regulatory transparency have been or are being adopted and improved in many countries. Like other countries, Korea has also been undergoing a dramatic change in growing demand for public involvement that results from increasing public awareness of nuclear safety issues. In coping with these challenges, Korean government establishes and announces “nuclear regulatory policy direction” on an annual basis that specifies major policy goals and yearly work plans in Korea. During recent four years, “public satisfaction with nuclear safety” has been continuously chosen as a prime regulatory policy goal and also public trust or confidence has been used as key words. In line with such an effort, KINS is getting more involved in improving transparency activities: KINS operates several cyber information systems to provide the public with safety-related information and to promptly respond to their inquiries. In addition, to on-line communication with the public through the internet, KINS performs off-line communication based on face-to-face meetings. It has

been hosting nuclear safety forums on a quarterly basis by inviting local residents, NGO members and general public, and providing the public, especially students and their parents with increasing opportunities to participate in the KINS activities through KINS Nuclear Safety School for their better understanding transparency. It also holds on-site presentation meetings with local residents about site specific outstanding safety issues.

Yesterday we have discussed the meaning of transparency and listened to the stakeholders' expectations regarding transparency, taking into considerations on the conditions for ensuring the transparency of regulatory activities. This morning we are going to discuss "Changing regulatory practices for ensuring transparency". I expect that presentations on regulatory practices on ensuring transparency from various countries in the Session 4 would provide insights on regulatory transparency, especially in connection with the communication issues with the public and many stakeholders. Based on this, the right and effective direction for regulatory transparency could be derived, I hope, during this session and workshop.

LESSONS LEARNT ABOUT COMMUNICATION FROM THE VANDELLÓS II EVENT

Mr. Julio Barceló
Commissioner, CSN, Spain

Abstract

On 25 August 2004 an event occurred at the Vandellós II nuclear power plant, which affected the operation of its Essential Service Water (ESW) system. The related facts and actions that followed finally showed that the event was the consequence of a degradation of the ESW system that was known by the licensee since 1998. The licensee had not taken any appropriate corrective actions or informed CSN about it, nor had the CSN regulatory inspection programme uncovered the degradation situation. The widespread corrosion of the ESW system, as it showed to be, represented a significant degradation of the defense in depth and hence of the safety of the plant.

CSN took a number of regulatory actions to require the licensee to make safety improvements and also initiated internal review process which finally resulted in the report approved by the CSN Plenary on 18 November 2005.

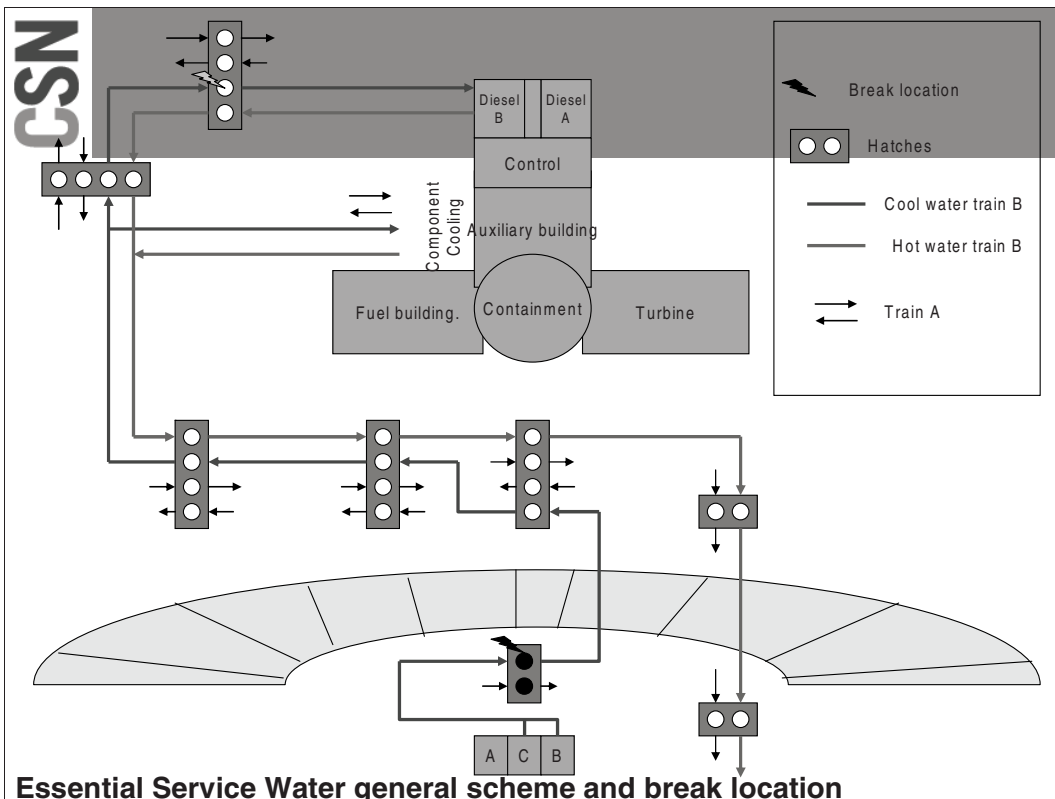
As far as transparency is concerned, the self assessment report concluded that even though communication from the Plant was repeatedly deficient, CSN technical staff should have reacted more rigorously to the licensee. Several deficiencies on external communications were also identified. The report concluded a series of lessons learned and its corresponding actions on communications and also on the interactions between the licensee and the CSN. Among the lessons learned: the need to establish a transparent and verifiable system of interaction between the CSN and the licensees; the advisability of greater opening up in the publication of public documents; and also the need to improve communications with all the authorities.

In answer to a Parliamentary requirement, CSN also requested the NEA to set up a Review Team to provide an independent peer review of the CSN Lessons Learned Report. That international assessment concluded a number of suggestions to be added to the actions approved by the own CSN report. Among those suggestions, there is the need to include in the new CSN information policy, a clear distinction between the respective information roles of the licensee and the CSN.

CSN has also already taken the steps required by both its Lessons Learnt Report and the international report. It may be said that since the Vandellós II event, the regulatory body has become a lot more transparent than it was.

OUTLINE

1. Short summary of the Vandelló II event and related CSN actions
2. CSN communication policy
3. Self assessment: lessons learned on transparency
4. International assessment: lessons learned on transparency



CSN communication policy

CSN should deserve the Spanish society's confidence and to be an international referent.

Stakeholders should be adequately informed and be part of CSN processes.

Self assessment: lessons learned on transparency

Interactions between the licensee and the CSN

General Considerations

Assessment

Lessons learned and corresponding actions

Communications

Assessment

Lessons learned and corresponding actions

Self assessment: lessons learned on transparency

Interactions between the licensee and the CSN

General Considerations

- In the absence of incidents, CSN performs the tracking of the operation of the plants through:
 - Daily operating reports issued by the licensee and checked by the RI
 - Habitual communications between the Project Manager, the Plants Deputy Director and other members of the technical staff
- CSN bases its control on the Basic Inspection Plan
- CSN does not intervene unless there is a deviation or anomaly in daily operation or in the Inspection Plan
- Agility of CSN response to an incident depends on the quality of the information received and on the fluidity of the exchange of this information.

Self assessment: lessons learned on transparency

Interactions between the licensee and the CSN

Assessment

- Throughout the entire treatment of the event an excessive delay in the different actions may be observed, due to:
 - Communication from Plant was repeatedly deficient
 - The technical staff should have reacted more rigorously to the licensee

Self assessment: lessons learned on transparency

Interactions between the licensee and the CSN

Lessons learned and corresponding actions

1. A transparent and verifiable system of interaction between the CSN and the licensees should be established for significant events.

Actions:

- Create a generally accessible network on events
- Make available single go-betweens to the extend possible. All documentation and communications should be traceable
- Develop systems for the transmissions of relevant information for action by the technical staff.
- The licensees should always be given the opportunity to comment on the CSN reports containing the results of incidents. Reports shall not be considered definitive, until this requirement has been met

Self assessment: lessons learned on transparency

Interactions between the licensee and the CSN

Lessons learned and corresponding actions

2. Evident usefulness of setting up assessment Working Groups.

Actions:

- Draw up a procedure applicable to Assessment Working Groups.

Self assessment: lessons learned on transparency

Communications

Assessment

- **CSN response had different phases and intensities:**
 - 1. Press releases**
 - 2. Public reports**
 - 3. Communications with local and regional authorities**

Self assessment: lessons learned on transparency

Communications

Lessons learned and corresponding actions

- 1. The communication to the public was restricted to press releases and a series of technical reports. Certain of these initiatives took place after information had appeared in the media.**
Action:
 - **Develop an integral and proactive communications policy with the external specialist and professional support necessary for its development**
- 2. Advisability of greater opening up in the publication of public documents.**
Actions:
 - **Technical reports supporting the agreements reached by the Plenary should be published along with the Minutes of the Board**
 - **When reports contain results of incident investigations that have not been sent for comments by the licensee, it should be pointed that the report is preliminary**
 - **All inspection reports shall be published**
 - **Work shall continue on the Communications Plan with a view to its prompt implementation**

Self assessment: lessons learned on transparency

Communications

Lessons learned and corresponding actions

3. It is necessary to improve communications with all the authorities, especially the regional and local authorities.
Actions:

- Update and extend the procedure for communications with the regional and local authorities to establish an information system allowing them to be kept punctually informed
- Develop a joint information model for events potentially or actually having repercussions in the press in the area of influence

4. The protection of confidential or proprietary information should be reinforced.

Action:

- Establish an internal system for the control of access to documentation that might contain confidential or proprietary information

International assessment: lessons learned on transparency

General considerations

Interactions between the licensee and the CSN

Detailed findings and suggestions

The external communications of the regulator

Detailed findings and suggestions

**International assessment: lessons learned
on transparency
General considerations**

- CSN requested the NEA to set up a Review Team to provide an independent peer review of the CSN Lessons Learned Report.
- The Review Team was to prepare a report on its findings regarding the adequacy and completeness of the lessons learned identified by CSN.
- The findings were to be based on practices by regulatory authorities from other countries. The findings may either highlight a good practice or include a suggestion or a recommendation.
- The team started its work by the end of November and the presented the final report the 3rd March.

**International assessment: lessons learned
on transparency
General considerations**

- The Team largely endorsed the actions proposed in the CSN Lessons Learned Report.
- To those proposed actions, the Team added its own suggestions, amplifying, developing and widening the scope of many of the actions proposed in the Lessons Learned Report.

International assessment: lessons learned on transparency

Interactions between the licensee and the CSN

Detailed findings and suggestions

It is important to ensure a correct balance in the interactions between the regulator and the licensee;

Informal discussions should take place within a formal regulator/licensee protocol in order not to jeopardize the independence of the regulator:

- *These issues should be addressed in an overall assessment of the various ways the CSN interacts with the licensees, with the objective to ensure that there are clear and appropriate internal policies and guidelines for different types of interactions and information exchange.*

International assessment: lessons learned on transparency

The External Communication of the Regulator

Detailed findings and suggestions

The CSN report makes a generally adequate assessment of the lessons learned with regard to external communications and the Team *supports* implementation of the actions identified in it:

- *In developing a proactive information policy and strategy, as proposed in the Lessons Learned Report, CSN should draw on the experience available through the NEA/CNRA Working Group on Public Communication of Nuclear Regulatory Organisations (WGPC).*

International assessment: lessons learned on transparency

The External Communication of the Regulator

Detailed findings and suggestions

The first press releases from CSN related to the event were characterized by lack of clarity as to the respective roles of the licensee and the regulatory authority in providing information to the public:

- *A clear distinction between the respective information roles of the licensee and the CSN should be included in the new CSN information policy and strategy, and the licensees should be made aware of their expected role.*

Important steps already taken

The communications team has been enlarged and focuses on enhancing a fluid relationship with the media based on trust and giving response to information requests

All minutes of the board are published. 60 have already been published on the website

All inspection reports are published. More than 400 have already been published on the website

Technical reports are sent for comments by the licensee. Regulatory guides and instructions open for comments by stakeholders before approval

Two 'key' legal instruments have been developed: 1) Proceedings of the CSN establishing in which cases the licensee must notify incidents, and 2) CSN procedure to notify these incidents to the public and stakeholders

An integral & proactive communications policy and the Communication Plan are being developed

LESSONS FROM THE PAKS NPP CASE STUDY

Mr. József Rónaky
Director General, HAEA, Hungary

Abstract

A serious fuel cleaning incident happened in 2003 at the Hungarian Paks Nuclear Power Plant resulting in 30 damaged fuel bundles. The event was thoroughly investigated by the national authorities and reviewed by an IAEA team. Recovery operations have been successfully finished recently. The event attracted wide political and media coverage.

Regulatory aspects of the event and the preparation for and realisation of the recovery operations will be presented with special emphasis on transparency and openness. Communication of the event itself and the national and international review process was challenging, but openness resulted in reconciliation of the Hungarian public.

Recovery operations were accomplished after a careful preparation that took about three years. The situation was further complicated by the fact that the plant decided to start the operation of the reactor next to the cleaning tank before the recovery action. Some changes had to be licensed by the Regulatory Body in order to start the operation of the reactor. It attracted quite a big media interest. Detailed communication plans were prepared and followed both by the Regulatory Body and the Operator. Stakeholders were regularly invited to the plant to witness the operations and milestones of the process.

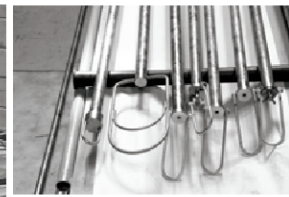
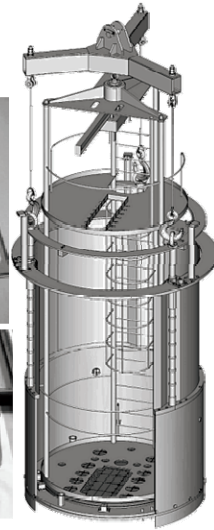
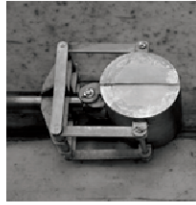
NGOs requested the Regulatory Body to make public all technical data of both the operation of the reactor and the recovery process. Legal procedures in the court are going on to determine the extent and nature of data publicity associated with the recovery operations, while the Operator claims that technical details are proprietary information and not fully public.

In the meantime lifetime extension of the plant and the construction of a low and intermediate level radioactive waste repository were debated and approved by the Hungarian Parliament.

Good communication and open debate resulted in a wide political consensus and high public support in Hungary on the future of nuclear energy.

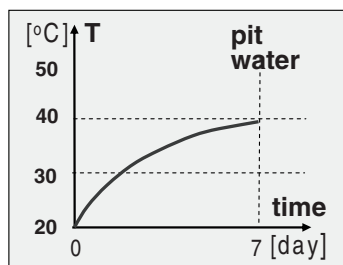
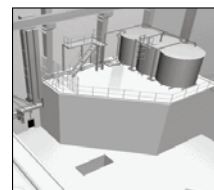
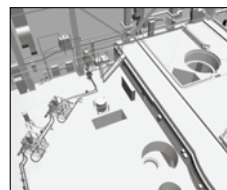
Preparation for removal

- A consortium led by the Russian TVEL was contracted for the elimination operations in fall 2003.
- Licensing:
 - License in principle, 06.2005
 - Working platform, tools, canisters, 2005-2006
 - Final license of operations, Summer 2006
- Tests and training in Dimitrovgrad and Paks, 2005-2006



Preparation for removal 2

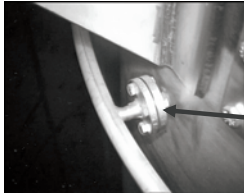
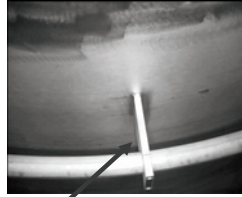
- Autonomous safety systems
 - Cooling system
 - Emergency boring system
- Preparatory tests
 - Grasp-tests
 - Canister drop-tests
 - Heat-up test



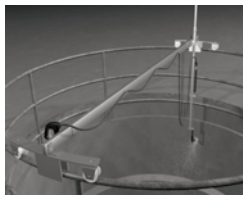
Preparation for removal 3

Preparatory operations

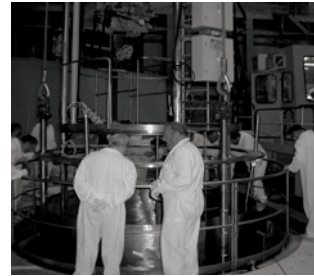
- Cutting unnecessary parts



- Decontamination of pit wall



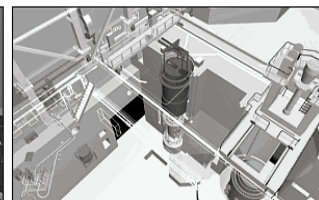
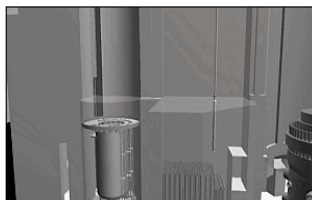
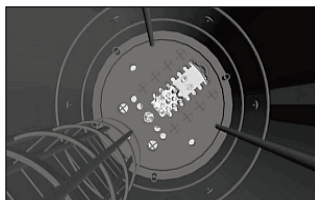
- Insertion of working platform



Recovery in 90 seconds



- platform insert
- canister transport
- canister fill
- 5-7 cycles
- platform remove
- $(60+30)/13$



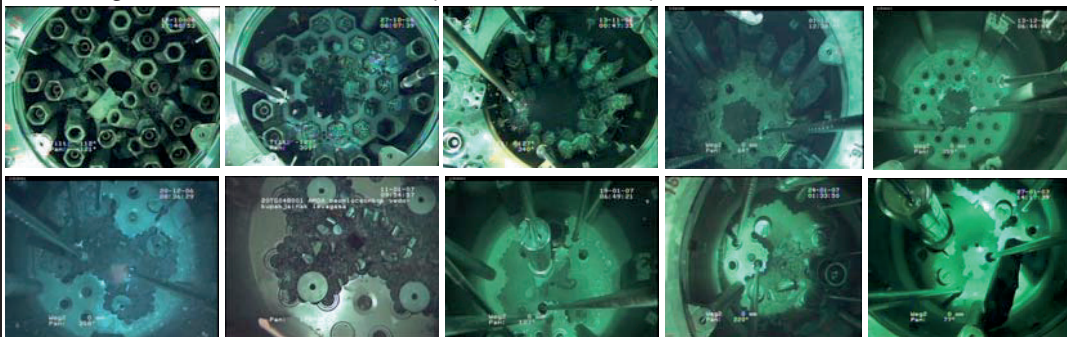
Schedule

- Classroom training: Spring 2006
- Training in inactive environment: Summer 2006
- Installation at Unit No. 2: August – September 2006
- Removal operations: October 2006 – January 2007
- Decontamination: February - April 2007



Removal of damaged fuel elements

⇒ Progress of elimination (11.06 –01.07)



⇒ **5810 kg damaged f.e. in 68 canisters, stored in the spent fuel pool, 767 kg waste (head and foot) in 8 tanks stored in the wells**



Communication

- Detailed communication plans for the removal operations was prepared and followed by the Regulatory Body and the Operator
- Stakeholders were regularly invited to the plant to witness the operations and milestones of the project
 - Local Information and Monitoring Association
 - National and EU MP's
 - Ministers
 - Media
 - Professional Associations

NGO interventions

- NGO's claimed for detailed licensing documentation
- Contradiction between 2 constitutional rights:
 - Proprietary information of the licensee and contractors
 - Publicity of environmental data
- Two lawsuits are going on

Regained public confidence

- Public support of nuclear energy is higher than before the event
- Life time extension program and the start of construction of a low and intermediate level radioactive waste repository was almost unanimously approved by the Hungarian Parliament

LESSONS FROM THE EPR CONSTRUCTION SUPERVISION

Mr. Risto Isaksson

Information Officer, STUK, Finland

Abstract

Just now the fifth nuclear power unit is under construction in Finland. The four existing nuclear power plants in the country were built in late 70s and early 80s. Building a new one is something unique for most of those involved in the project. In thirty years society has changed and public administration and legislation have evolved. Situation is new also from this perspective. The basic principles anyhow remain the same. Safety comes first and no economical, energy political or such reasons can influence the work of the safety authority. Compared to the situation 30 years ago, a new aspect is that all actions are taken and all decisions are made in a more open, more transparent environment.

Licensing

Licensing of nuclear facilities in Finland can be divided in two phases. The political part ends when Finnish Parliament ratifies or doesn't ratify so called Decision in Principle, DiP. The DiP is Governments answer to the main political question: is the proposed build nuclear facility in line with the overall good of the society? After ratification the processes directing towards construction permit and operating license are more or less technical.

The Finnish Government made in January 2002 a DiP which concludes that constructing of a new nuclear power in Finland is in line with the overall good of the society. The Finnish Parliament ratified the decision in May 2002 with votes 107-92.

DiP authorised the electricity generating company TVO to continue preparations for the construction of a new NPP unit: choice of plant type, contracting, site selection and preparation, Construction Permit application. TVO ended up building an EPR concept NPP at Olkiluoto in Eurajoki municipality. On the same site TVO already has two operating reactors.

Finnish Government granted the construction licence on 17 February 2005.

Transparency in licensing

Before leaving the application for the DiP TVO had to complete Environmental Impact Assessment, EIA. EIA is made by the applicant company and contact authority in the case of nuclear facilities is Ministry of Trade and Industry. Public hearings and participation of local public are key

elements in the EIA process based on the environmental legislation but also in the DiP process based on the nuclear legislation. The results of the EIA are important information for the Government when it considers the DiP. Other prerequisites for making a positive DiP are STUK's preliminary safety judgement and municipality's approval. In addition, anyone can send written comments to the Ministry and the Ministry makes a summary on those to the Government.

In the democratic decision making process for new nuclear facilities in Finland the Parliament has a key role. Before the decision on whether to overrule or to ratify the DiP the Parliament hears experts, stakeholder groups, ngo's, authorities, scientists etc. Before the voting on DiP spring 2002 different parliament committees heard altogether hundreds of experts in their meetings.

Papers STUK produces – preliminary safety judgement for DiP and safety assessment for construction license – are open for the public after being completed. During the assessment process, discussions took place only among specialists in and outside the authority. The completed papers were then made available for the public on STUK's web pages and press releases were published.

Documents produced during the process including the comments received by the Ministry of Trade and Industry on the application for DiP and construction licence are on view on the Ministry's web page.

Transparency during construction phase

After construction of the plant started, the licensee (TVO) has had regular contacts with the media. In their monthly press conferences at the site they report the progress of the process. It soon became clear that original time table for construction was too ambitious. TVO has updated at least twice the schedule and tells now that commercial operation of the plant will start in the turn of the year 2010-2011. This is about year and half later than planned.

STUK's policy on public communication regarding OL3 project is to follow the normal practice. STUK wants to help the media in it's work and every employee is obligated to take part in this when questions are on their own field of expertise. This means that STUK does not have any nominated spokes persons.

There has not been need for too many proactive actions – with one exception. On 7 March, 2006, STUK published a press release telling that it had appointed an investigation team after having noticed that the management of organisations participating in the construction of OL3 unit do not fully comply with STUK's expectations concerning good safety culture.

STUK published a very detailed report of the investigation team in its web 12 July. The investigation team concluded that major problems were involved in project management, in particular with regard to construction work, but these problems did not degrade nuclear safety. The investigation team provided recommendations both to the licensee and the vendor company.

They reported also that there was room for improvement in the practices of the regulatory body, STUK.

Publication of the report caused a big media interest in Finland and abroad. Since the publication the report has been broadly visited and cited. It also turned out that the vendor of OL3, FANP-Siemens, had initially difficulties to accept the publication. However, it has made the recommended improvements in its project management, and today the construction proceeds well.

Media and public response

OL3 project is unique because it is a NPP project but also because it is the biggest construction site in Finland on the whole. It is understandable that the project and its problems are a permanent subject in the media. The stories have mainly stayed on economy pages and STUK's view on safety has been accepted generally.

STUK has not measured its credibility among the public lately whereas the European Unions Eurobarometer has done it for nuclear authorities in all EU member states. Result of the Eurobarometer is encouraging for STUK. Finland is one of four EU countries where national nuclear safety authority is the most trustworthy source of information about nuclear safety. The other three are Sweden, Czech Republic and Slovakia (51-72% regard safety authority to be most reliable). On average in EU scientists are on the first place on the list, NGOs on second and nuclear safety authorities' just on third place (28%).

EPR under construction Olkiluoto, Finland

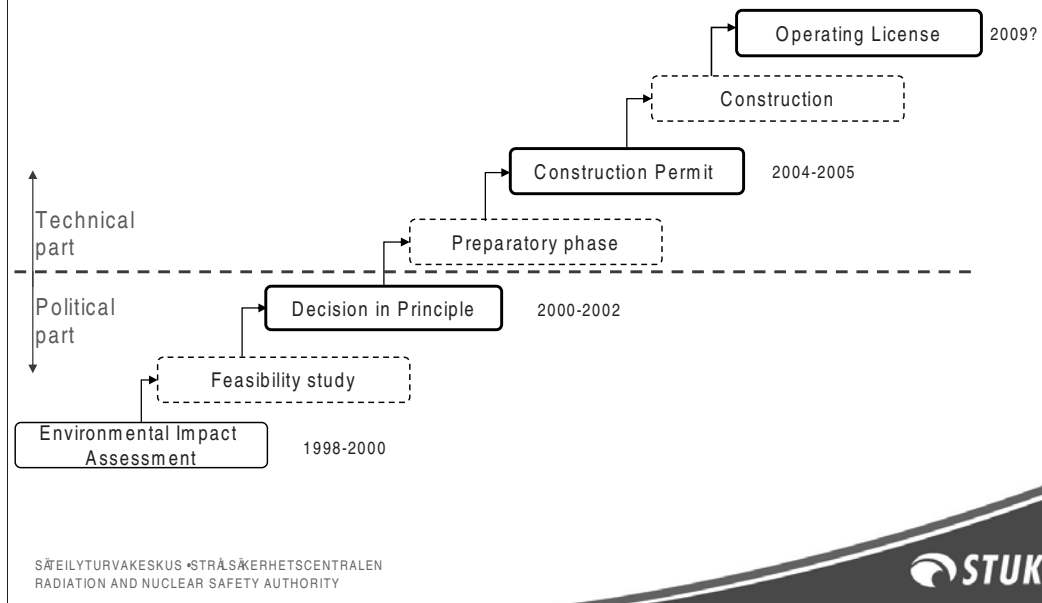


Picture from March 2007; TVO

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RADIATION AND NUCLEAR SAFETY AUTHORITY



Olkiluoto 3 licensing phases



Transparency in Licensing 1 Environmental Impact Assessment (EIA)

- EIA is based on environmental legislation, it is not included in the Nuclear Energy Act
- EIA provides useful input for the Decision in Principle which is the first step of NPP licensing according to the Nuclear Energy Act
- EIA does not require specific information on plant type and technology
- Public hearings and participation of local public

Transparency in Licensing 2

- Other prerequisites for making a positive DiP
 - STUK's preliminary safety judgement
 - Municipality's approval
- Public hearings and participation of local public also part of the DiP process based on the nuclear legislation

Transparency in licensing 3 DiP in the Parliament

- Parliament made a thorough assessment in 8 Committees before voting in the plenary session
- Out of the 200 Parliament members, 115 attended the work during spring 2002 in one or more committees. Each committee heard a very large number of experts (up to 85 in one committee) in order to get different views.

Transparency in licensing 4

- STUK's preliminary safety judgement for DiP and safety assessment for construction license are open for the public after being completed
- Documents produced during the process including the comments received by the Ministry of Trade and Industry on the application for DiP and construction licence are on view on the Ministry's web page (www.ktm.fi)

Government Decision in Principle on new nuclear power plant

- The Finnish Government made in January 2002 a Decision in Principle (DiP) which concludes that constructing of a new nuclear power plant (NPP) in Finland is in line with the overall good of the society. The Finnish Parliament ratified the decision in May 2002 with votes 107-92.
- DiP authorised the electricity generating company TVO to continue preparations for the construction of a new NPP unit: choice of plant type, contracting, site selection and preparation, Construction Permit application.

Construction licence

- DiP authorised the electricity generating company TVO to continue preparations for the construction of a new NPP unit: Choice of plant type, contracting, site selection and preparation, Construction Permit application
- TVO ended up building an EPR concept NPP at Olkiluoto in Eurajoki municipality. On the same site TVO already has two operating reactors.
- Finnish Government granted the construction licence on 17 February 2005.

Licensee (TVO) and the media during construction phase

- has regular contacts with the media
- monthly press conferences
- report the progress of the process
- negative publicity because of the delay in the project
- this spring the Finnish media has begun to write more positive stories about the progress of the process - reflects the reality

Transparency during construction phase 2 STUK

- STUK follows the normal policy on public communication
- to help the media and journalists
- preliminary safety judgement for DiP and safety assessment for construction license made public with press releases and published on STUK web pages

Transparency during construction phase 3 STUK

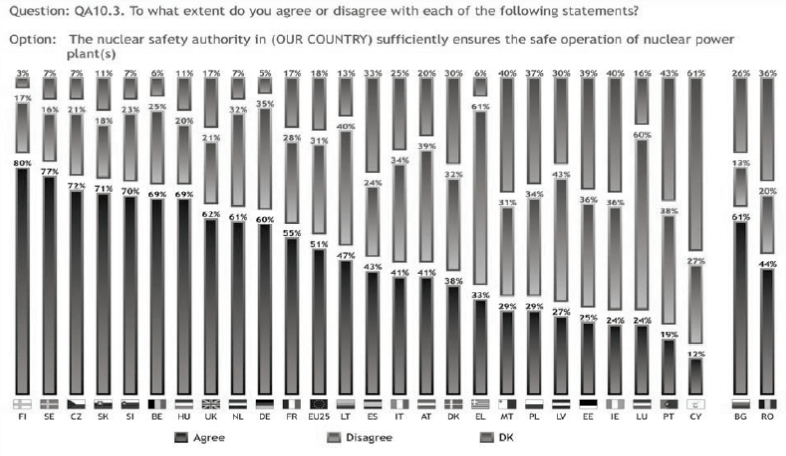
- report of an investigation team “Insufficient guidance of subcontractors’ work in Olkiluoto 3 nuclear power plant project”
 - major problems in project management
 - room for improvement in the practices of the regulatory body
- published on 12 July 2006
 - press conference and press release
 - whole report in web
- STUK’s open communication policy came as a surprise for the vendor of OL3, FANP-Siemens

Public Response 1

Special EUROBAROMETER 271

"EUROPEANS AND NUCLEAR SAFETY"

- Respondents in countries with NPPs think that their nuclear safety authorities perform sufficiently -



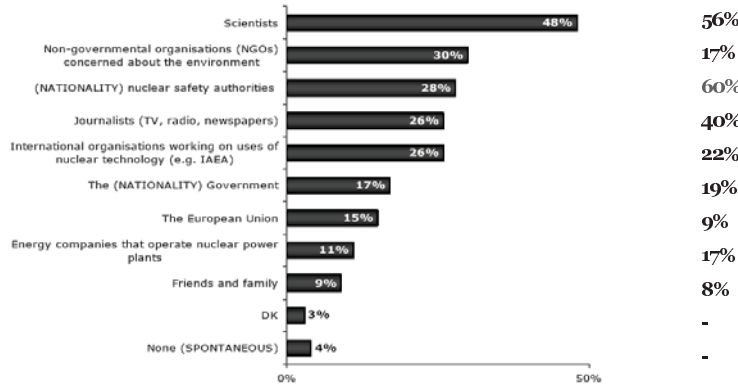
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Public Response 2

- Scientists are considered to be the most trustworthy source of information -

QA6 Which 3 of the following would you trust most to give you information about nuclear safety? (MAX. 3 ANSWERS) - % EU25



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UTILISATION OF OPERATING EXPERIENCES – NUCIA (NUCLEAR INFORMATION ARCHIVES)

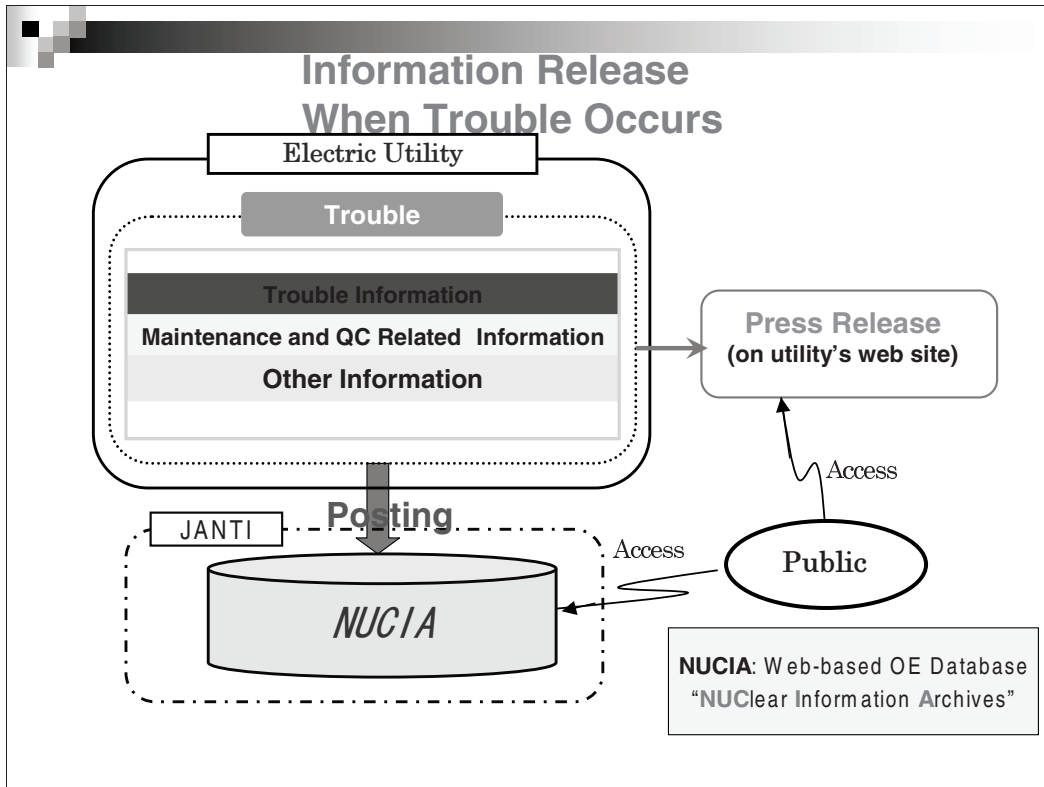
Mr. Tadakazu Tsuruta

Director for Operating Experience Analysis, JANTI, Japan

Abstract

In this presentation, “NUCIA (Nuclear Information Archives),” an information-disclosure library for nuclear facilities, is introduced as one of the action cases to ensure transparency of nuclear facilities. At the opening of the presentation, the mechanisms of information disclosure to be used in the event of trouble are overviewed, and the role of NUCIA will be explained in the process.

Next, registered information and the data on administrative performance are introduced after explaining the purpose and principal content of NUCIA referring to the on-screen display of the actual conditions of NUCIA.



Nuclear Facility Information Library NUCIA

(NUCIA:NUCclear Information Archives URL: <http://www.nucia.jp>)

1. Purpose
 - (1) To prevent accidents and failures from occurring and recurring by sharing accident and failure information among operators and utilizing it.
 - (2) To obtain public trust in nuclear facilities by making open accident and failure information to the public
2. Main Contents Released
 - (1) Accident and failure information of nuclear power plants
Names of the utility and unit, date and time of occurrence, descriptions, causes, countermeasures, etc.
 - (2) Feedback of findings from accidents and failures of nuclear power plants to other companies
Name of trouble and status of feedback of findings from troubles to other companies.
 - (3) Reliability information of nuclear power plants
Explanation of analytical method, equipment failure rate (49 plants for 16 years), etc.
 - (4) Accident and failure information of nuclear fuel cycle facilities
Name of trouble, date and time of occurrence, descriptions, causes, countermeasures, etc.
 - (5) Accident and failure information of overseas nuclear power plants
NRC information (Bulletin, Generic Letter and Information Notice) and responses to it by operators in Japan.

The System has information display (screen printing and browsing) and retrieval functions.

3. Start of Operation
October 1, 2003

Contents of NUCIA

① Accident and failure information of nuclear power plants

原子力施設情報公開ウェブサイト
 ニューシア
 www.nucia.jp

| 通報番号 | 発生年月日 | ユニット名 | 件名 | 更新日 |
|------|--------------|-------------|-------------|-------------|
| 0076 | 2005-東京-5088 | 2006年01月20日 | 福島第二発電所2号機 | 2006年01月20日 |
| 0078 | 2005-東京-5092 | 2006年01月19日 | 船橋川別荘発電所1号機 | 2006年01月20日 |
| 0079 | 2005-東京-5096 | 2006年01月19日 | 福島第一発電所6号機 | 2006年01月20日 |
| 0072 | 2005-東京-T046 | 2006年01月19日 | 福島第二発電所4号機 | 2006年01月19日 |
| 0077 | 2005-東京-5095 | 2006年01月19日 | 船橋川別荘発電所2号機 | 2006年01月20日 |

② Feedback of findings from accidents and failures of nuclear power plants to other companies

| 通報番号 | 発生年月日 | ユニット名 | 件名 | 備考 | | | | | |
|---------|------------------|-------|-----------------------------|-----|----|----|----|----|----|
| 0990204 | 2004-2004年09月09日 | 内務省 | 原子炉冷却系上部圧力制御系統異常発生からの漏洩について | 伊勢湾 | | | | | |
| 0990204 | 2004-2004年09月09日 | 東北 | 中部 | 北陸 | 関西 | 中国 | 四国 | 九州 | 原発 |

③ Reliability information of nuclear power plants

③ 信頼性向上 発生条件

- データ入力の遅延: PSA
- 故障発生時の時間遅延
- 検出: 電動ポンプ
- 故障モード: 運転失敗
- 運転時間: 原子炉運転時間
- 期間: 1982年-2002

| ユニット名 | 稼働率(%) | 運転時間(h) | 停止時間(h) | 故障率(%) | 故障率(10 ⁻⁶ /h) | | |
|-------|--------|-----------|-------------|--------|--------------------------|------------|------------|
| DWR合計 | 950 | 294990.0 | 1.9595900E9 | 2 | 3.24267E-9 | 1.82500E-9 | 5.74401E-9 |
| PWR合計 | 821 | 2700216.0 | 9.6991224E7 | 1 | 5.31092E-10 | 1.03540E-9 | 4.91179E-9 |

④ Accident and failure information of nuclear fuel cycle facilities

| | |
|---------|--|
| 施設名 | 再処理 |
| 国への送付種別 | (その他情報) |
| 件名 | 使用済燃料受入れ・貯蔵施設バーナールボイザー取組ビッドからの水の漏洩について |
| 発生日 | 2005年08月19日 |

⑤ 事故発生時の状況

1. 漏洩の概要
 ・平成17年8月6日、使用済燃料受入れ・貯蔵施設のバーナールボイザー取組ビッド以下、「BP」取組ビッドより、水漏洩を発生。この水を送付した結果、放射能を含んでいたので、當日の9日、プール内の高い位置で検出された。
 ・その後、13日から漏洩し、最初の特定作業を開始し、20日に終了したが、漏洩し箇所は貫通部の埋コンクリート部分であった。

⑥ 今回の漏洩の安全性への影響
 ・今回の漏洩は、自然落下で平均 時間あたり約 0.02リットル、高さポンプによる強制吸引の出水で平均 時間あたり約 3リットル。
 ・この量は、プールが自然に蒸発する量の年間平均約 1時間あたり約 100リットル、プールなどの水の補給能力約 1時間あたり約 500リットル、プールも含む廃液処理能力約 1時間あたり約 500リットルの範囲内で十分にとまると見込まれた。
 ・したがって、プールの冷却機能を維持し、漏洩した物質は放射性物質を除去し、放射線量を抑制した。漏洩に気づいていることから、安全に影響を及ぼすものではなかった。

⑤ Accident and failure information of overseas nuclear power plants

| | |
|-------------|---|
| 国名 | アメリカ |
| ユニット名 | --- |
| 件名 | 原子炉冷却系再循環ポンプ及び一次冷却ポンプの軸振動の監視による、ポンプ軸の両方向の欠陥 |
| 国別原子力事象評価尺度 | --- |
| 出典(国別) | Information Notice |
| 出典(テキスト) | 2005-08 |

⑥ 事故発生時の状況
 ORE社はBWRプラント用再処理に、原子炉冷却系再循環ポンプの磨耗監視のモニタリング、ポンプ軸振動の監視や、運転時間が長時間を超るポンプ軸の検査を行うよう指示を行った。
 ポンプ軸の両方向の欠陥はポンプに悪影響を及ぼさないが、両方向の欠陥はポンプの経路やシール漏洩しの原因となる。
 ポンプ軸振動の監視は、ポンプ軸の両方向の欠陥を検知するための有効である。

⑦ 国内対応
 国内のPWRでは、定期時に一次冷却ポンプの軸振動を点検し、両方向の値がないことを確認しており、運転中はポンプの軸振動監視を行っているため、新たな対応は不要。
 国内のBWRでは、定期的な原子炉冷却系再循環ポンプの軸振動を点検し、両方向の値がないことを確認しており、運転中はポンプの軸振動監視を行っているため、新たな対応は不要。
 なお、美へのプラントでは、軸振動監視の対象として監視したポンプケーシングに交換している。

Information Registered in NUCIA (examples of nuclear power plants in Japan)

1. Trouble and failure information
 - (1) Trouble Information

On events reportable to the national government in accordance with laws and regulations
 - (2) Maintenance and Quality Control Related Information

On Minor events not reportable to the national government but beneficial not only for utilities but for the industry, government and academia to improve safety activities by information sharing: Posting criteria;

 - 1) Damage or its sign caused by deformation, defect, crack, thinning, wear, pin hole, etc. found in the safety important equipment and others
 - 2) Violation of Operational Safety Program
 - 3) Deviation from operating limits
 - 4) Reactor trip due to failure or power changes of more than 5 %
 - 5) Outbreak of fire
 - 6) Establishment of measures to prevent recurrence of troubles
(if important parts or items including main piping, main valves and pumps have been omitted from the inspection list)
 - (3) Other Information

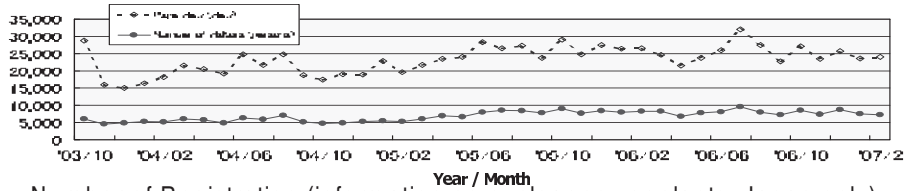
The information that is not required to be shared among the operators but is made public via press release or on their web sites to enhance transparency in nuclear power plant operation:
 Examples;

 - 1) Events in which power transmission by a power plant are stopped because of natural phenomena (lightning, etc.)
 - 2) Daily maintenance and inspection information not related with safety
(Minor water leaks; drop, discovery and retrieval of foreign materials; anomaly, functioning failure and damage of non-safety important equipment, etc.)

Operating Status of NUCIA (as of end of February 2007)

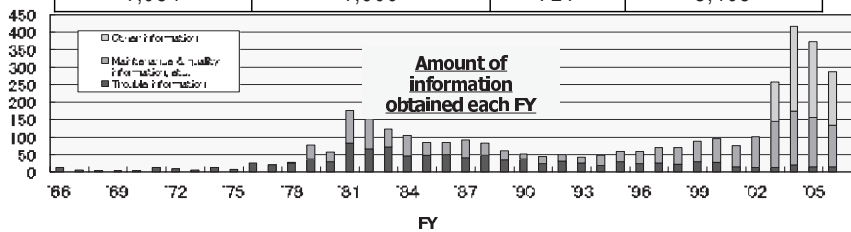
Access

| Number of Visitors (monthly average value) | Page View (monthly average value) |
|--|-----------------------------------|
| Approx. 6,900 persons | Approx. 23,000 views |



Number of Registration (information on nuclear power plants, Japan only)

| Trouble Information | Maintenance And Quality Information, etc. | Other Information | Total |
|---------------------|---|-------------------|-------|
| 1,084 | 1,600 | 721 | 3,405 |



LESSONS FROM THE FORSMARK 1 EVENT IN SWEDEN

Mr. Anders Jörle

WGPC Chairman, Head of Information Office, SKI, Sweden

Abstract

A short circuit at a switchyard broke some of the safety chains in the reactor safety system and created a difficult situation in the control room at the Forsmark 1 power plant in Sweden. After a scram two of four diesel generators failed to deliver power but the reactor could safely be controlled through remaining two systems and power could be distributed from external grid after 22 minutes. Surveillance systems in the control room also failed and the situation at the reactor was unclear.

Analysis shows that there was never a risk to the public and no damage on the core.

The incident exposed unknown weakness in the power supply systems of the reactor. Also it was found that maintenance had failed and some components were not properly installed.

The regulator identified the problem as a serious failure but did not at once realise the public impact. The licensee was late in its decision making and did only publish local press releases that did not fully expose the nature of the incident.

After some days an independent expert claimed that a core melt was a close possibility. He was widely quoted and created a media impact in many European countries.

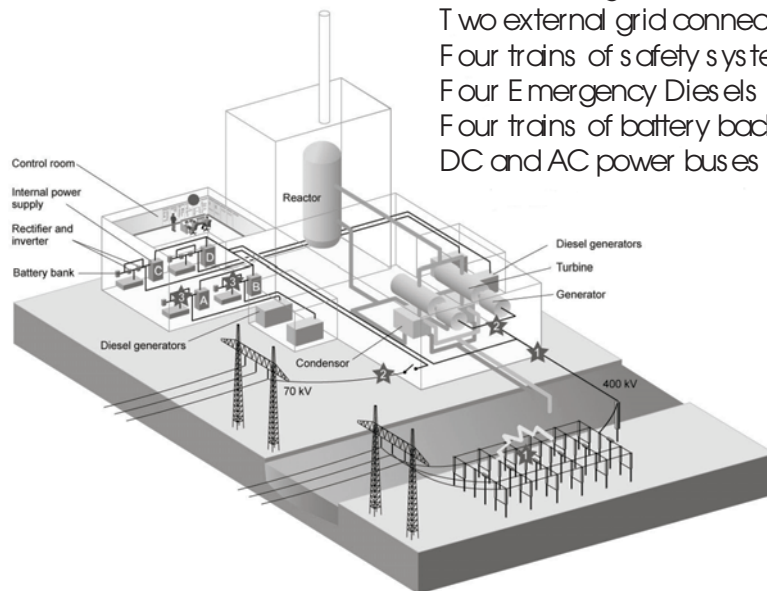
In the light of the incident problems with safety culture was identified at the plant and additional findings showed problems in the management system of Forsmark. Growing media interest culminated in January when a critical internal report from staff members in Forsmark was made public.

Some lessons learnt:

- Media activity followed well-known patterns.
- The regulator was an important source for media.
- Regulator not fired upon until January, after a long autumn filled with negative reporting on Forsmark.
- The plant was not proactive in its communication which created a problem for the regulator.

Forsmark 1 NPP

Reactor 2928 MW_{th}, 1006 MW_e
Two turbine-generators
Two external grid connections
Four trains of safety systems (A,B,C,D)
Four Emergency Diesels Generators
Four trains of battery backed-up
DC and AC power bus es



SKI

The situation during the first minutes

- Reactor shut down by automatic scram
- Reactor cooling started automatically with 2 out of 4 trains (1 is needed)
- Residual cooling started automatically with 2 out of 4 trains (1 is needed)
- Containment has been automatically isolated. A few valves did not closed due to loss of safety AC power but their redundancy did.
- No operator action needed within 24 hours or more to maintain the reactor in a safe state.

SKI

The situation after 22 – 45 minutes

- After 22 minutes Operator have re-established the power to safety bus bars sub A and B from offsite power,
- all safety systems were available and
- remaining isolation valves have closed
- After 45 minutes a second run of EOP gave a final verification that the reactor was safe undercritical and in a stable operational mode.

SKi

Relevant design codes (SKi Regulatory Code)

- **Failure in operations classified equipment may not affect the performance of equipment with safety function**
- **Reasonable technical and administrative measures shall be taken in order to counteract common cause failures.**
- **The nuclear power reactor shall be designed so that the redundant parts and their support functions have sufficient physical and functional separation.**

SKi

Conclusions

- The safety systems did not meet the design codes since the safety AC systems did not withstand the voltage transient, the same fault existed in several redundant units and the dependency revealed a lack in robustness.
- The event also showed an insufficient quality in design, maintenance and testing of the operations equipment and distribution plant.
- The design of the control room dealing with the operations equipment and distribution plant is questionable.

SKi

Short time actions (prior to start up)

- Design changes in UPS to withstand voltage transients
- Design change to eliminate the dependency that the Emergency Diesel Generators have of AC power (UPS)
- Design change to eliminate misleading information in the control room

SKi

Why did this happen

- In the late 90's SKI raised concern on the deregulated market and the development of technical investments in safety.
- Maybe we should have focused more on operations and maintenance ...

SKI



- 25 juli: SKI notified at 14´hour.
- 26 juli: Incident rated as category 1 according to SKI regulatory system. SKI has to approve a restart. Investigation team sent to plant. First press release from utility. (Very limited information)
- 27 juli: Incident preliminary rated as INES 2 and communicated externally By SKI. (*Press release.*)
- 28 juli: Letter to other Swedish units to investigate if similar weakness could occur. Answer at Aug 2´nd at latest. (*Press release*)
- 2 aug: Issue of potential core melt big in Swedish media. Quickly spread internationally. Decision by EON to stop operations at O1 och O2.
- 3 aug: SKI works according to emergency plan due to big media impact.
- 4 aug SKI agree with utilities on situation in the other six reactors. Can continue operations. (*Press release*)

SKI

Goals for SKI external communication



- Decisionmakers and public should be well informed on nuclear safety in Sweden.
- Facts of relevance for the view on the safety of the nuclear installations, and incidents, should be made public without delay.
- In case of accidents together with Radiation Protection Authority provide coordinated information.

SKI

SKI emergency 24 h

- VB – officer on duty
 - Technical person.
 - Have power of Director General on off-duty hours
 - Can decide on emergency
- Communicator
 - Information officer
 - Access through one single telephone number
 - Primary for media but support the technical officer on duty.
 - Inform SKI management, government officials, other agencies and local politicians .

SKI

Important on SKI crisis management:

- All units of SKI always have an acting head that have authority to act on operational issues.
- Communicators have access to all meetings.
- Bullpoints for communication are decided at once.
- Decision on official spokesperson/persons (in case of Forsmark we had to have a group.
- Director General does not go public too early.
- Investigators investigates, other has to do the media.

SKI

Other items of interest.

- Communicators have enough technical knowledge to answer most questions.
- All staff members are trained in media relations.

SKi

Lessons learned

SKi

Use of the INES scale

- INES is well known in Sweden
 - An incident on level 2 - press release!
 - Preliminary rating at day 3.
 - The level was never questioned.
 - INES was a support for our communication.
- *Important also to explain a little bit of what the scale measures – exactly what happened and nothing more*

SKI

The web

The Swedish government's regulatory body that supervises all nuclear activities in Sweden

- All final documents were published on the web site, both the ones produced by SKI and some of the more interesting documents from the utility.
- Example; the final report from Forsmark was released on the web the same day it was officially received by SKI.
 - ... but we don't make any comments until our own report is finished

SKI

Other experiences – lessons learned

- Underestimation of the media impact by utility (and by SKI the first week).
- Questions to the regulator was both technical and regulatory.
 - Key issue; possibility of a core melt.
 - Key SKI message: no public danger but serious enough
 - Many questions in the area of "experts on behalf of the public."
- The web page saved a lot of work. All documents of relevance were published. Around ten headlines in total until now on F1.
- All press releases translated to English.
- Utility used their web also, around 20 news items on F1 published.

SKI

More experiences

- It's timeconsuming to do other external relations when hunted by media.
 - Strong focus on local municipality.
- Should done more for regional administration.
- We could probably been better on Scandinavia and CNRA members earlier but the event report to IAEA was sent very fast.
- flash@ news was used a couple of times. It also gave input to us.



SKI

Very big and unexpected international impact

- Huge interest from german speaking countries.
- Some days we had more international calls than Swedish.
- It stress the importance of translating items on the web page.
 - We did that ourselves in many cases because there were no fast translators available



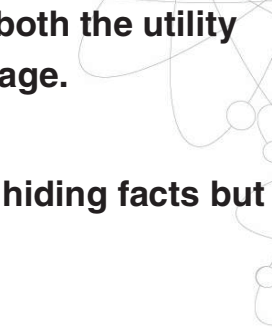
SKI

The utility did not communicate enough

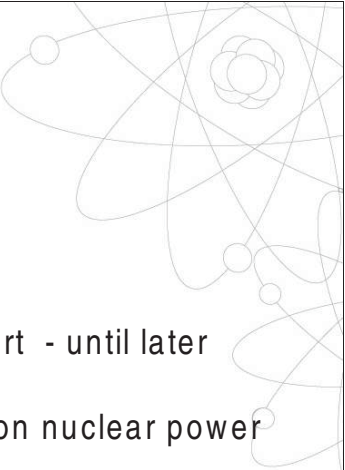
- How much should regulator communicate?
- Utility has a responsibility to be visible and communicate



SKI

- 
- **In all, the media was quite fair to both the utility and SKI, especially in the early stage.**
 - **Green party did attack on SKI for hiding facts but did not have any success.**
 - **The incident was never an issue in the election campaign, not even raised by the green party.**

SKi

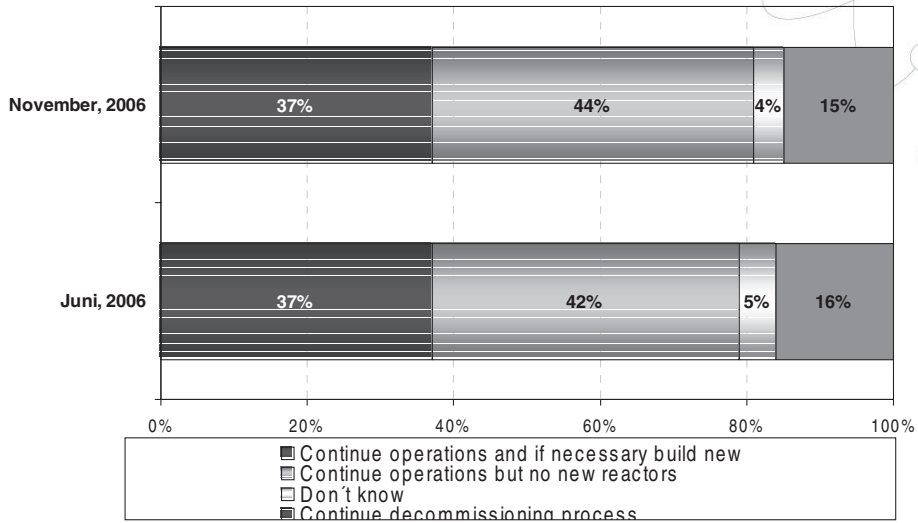


Confidence in regulator was not hurt - until later
And there is no change in opinion on nuclear power

SKi

8 of 10 Swedes wants to continue nuclear operations

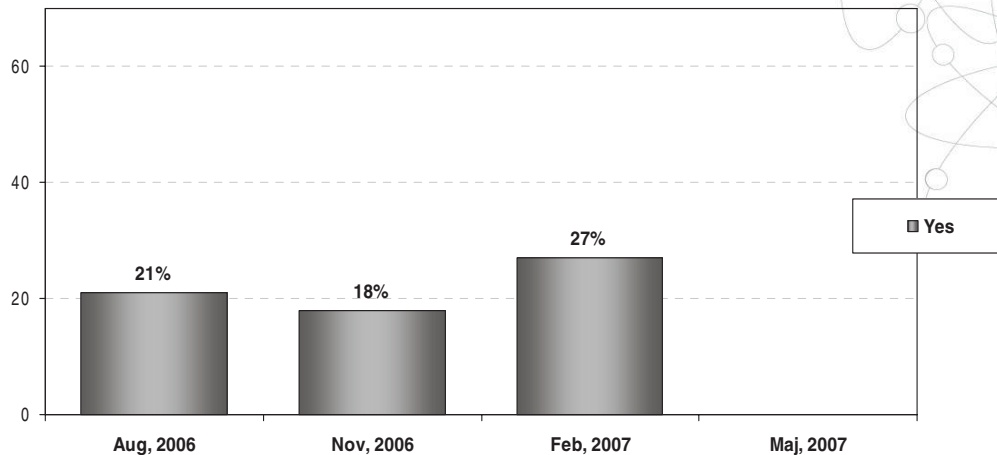
Your personal view on nuclear power in Sweden. Shall we...?



SKI

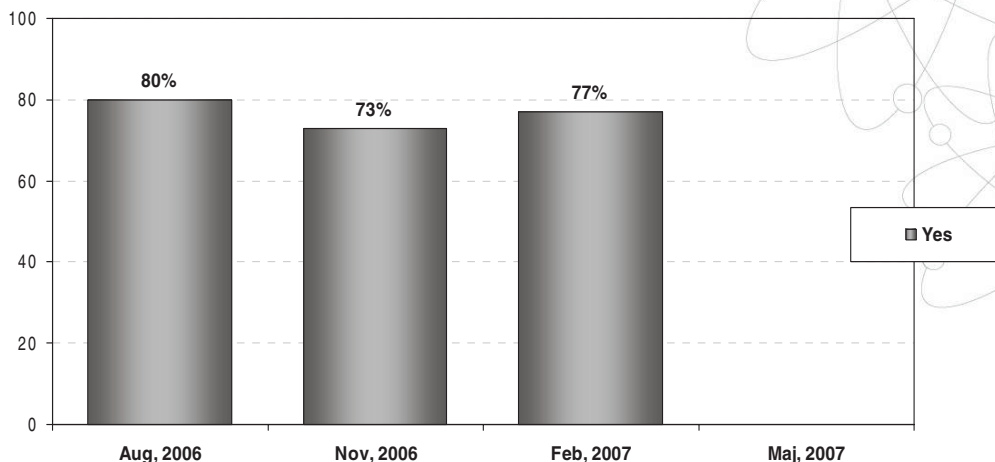
Knowledge of regulator

Do you know the name of the nuclear regulator, what is it?



SKI

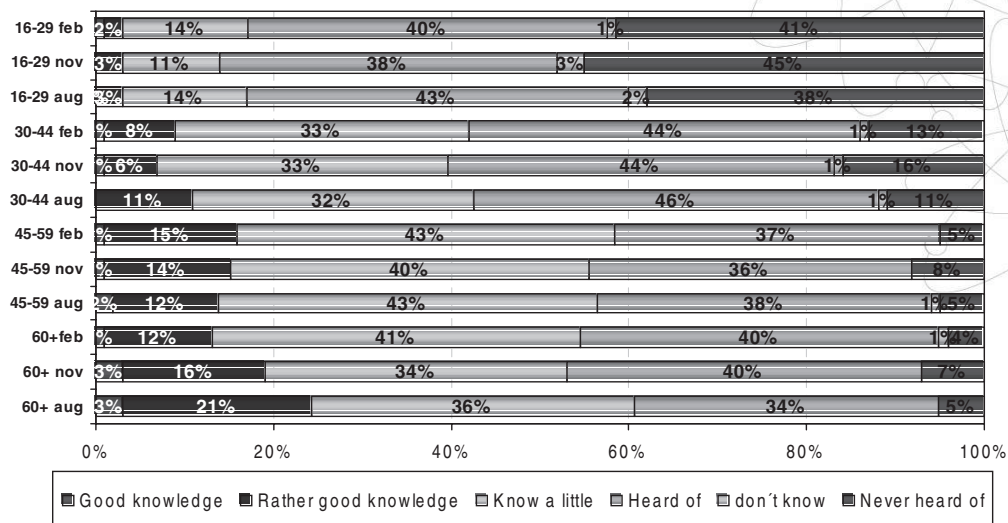
February 2007 Knowledge with reminder of name



SKI

Knowledge based on age

How well do you know SKI?

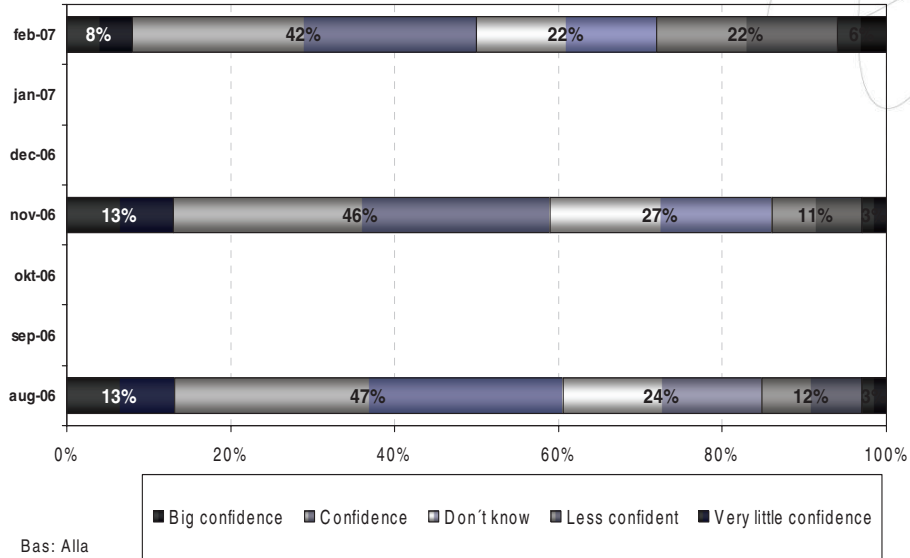


Bas: Alla

SKI

Confidence in SKI as regulator

How would you describe your confidence in the regulator – SKI?



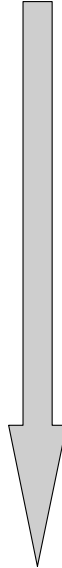
SKi

Timeline

SKi

Timeline and issues

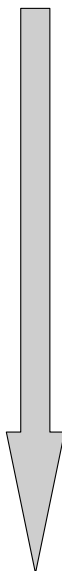
- 25/7 Incident communicated by plant to local media
- 27/7 INES 2 released by SKI
- 3/8 The issue of a possible core melt raised by media
- 22/8 Plants event report to SKI published on SKI web



- Stop of production
- Questions to SKI; What are the safety concerns?
- Did the regulator and the plant hide anything? SKI strongly denied a possible core melt. Big media impact, and in Germany
- A lot of different technical questions. Issue of core melt still on agenda.

SKi

- 14/9 SKI decisions and demands on plant. Press conference.
- 28/9 Decision to permit restart
- After restart several small problem
- 17/10 Problem with welding in upper containment at F2, lack of inspection papers when asked by SKI and SKI stop operations.



- Told fair by media. Many questions concerning whether SKI have trust in Forsmark management.
- Reviewed but no other comments.
- Media confusion
- SKI pretty upset but little media impact on decisions made and press release.

SKi

- 1/11 SKI to tell prosecutor of possible violation of nuclear law by Forsmark, exceeding permitted levels of thermal effect in april.
- 19 of December, SKI requests a very critical internal report from Forsmark found during inspection
- 24th January, a well known investigative reporter on television request an interview on the report.
- 29th Other journalists find out about the report before Svt

2007

- Press release. Media reporting normal.
- It's a public document registered in our system but no journalists ask for it.
- Major story in the news. "Secret report" about the plant. The story is; "regulator is captured by plant". Denied, but a big debate starts on both nuclear safety and nuclear regulation.

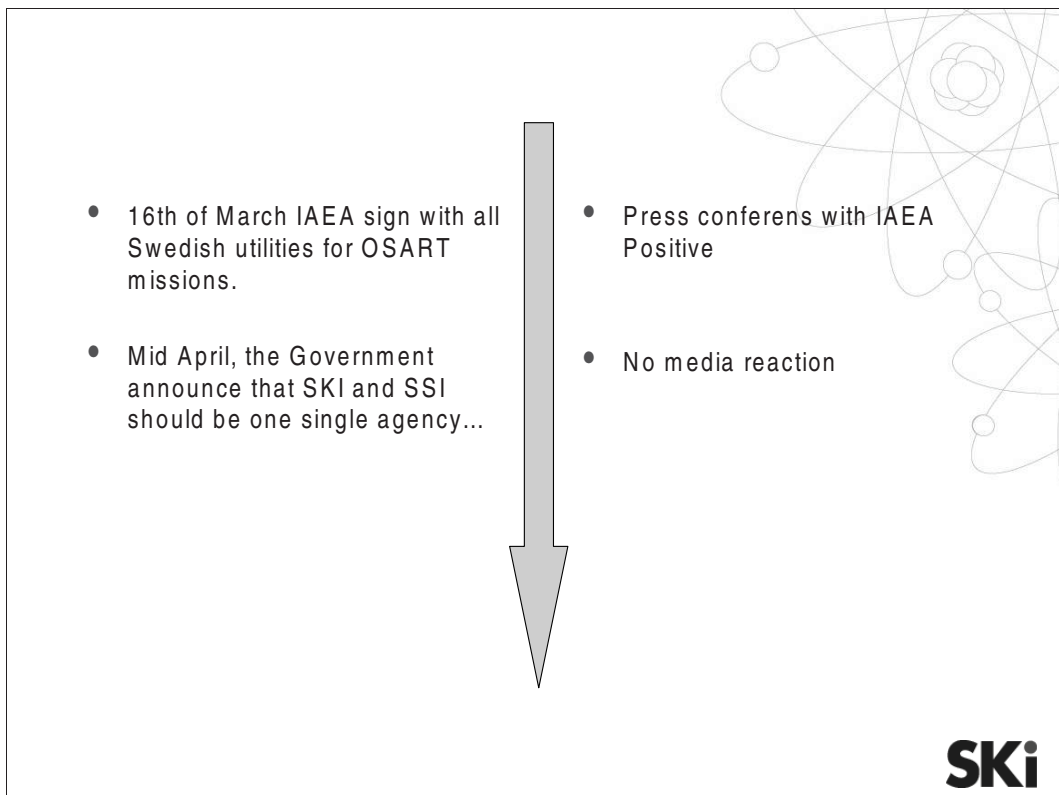
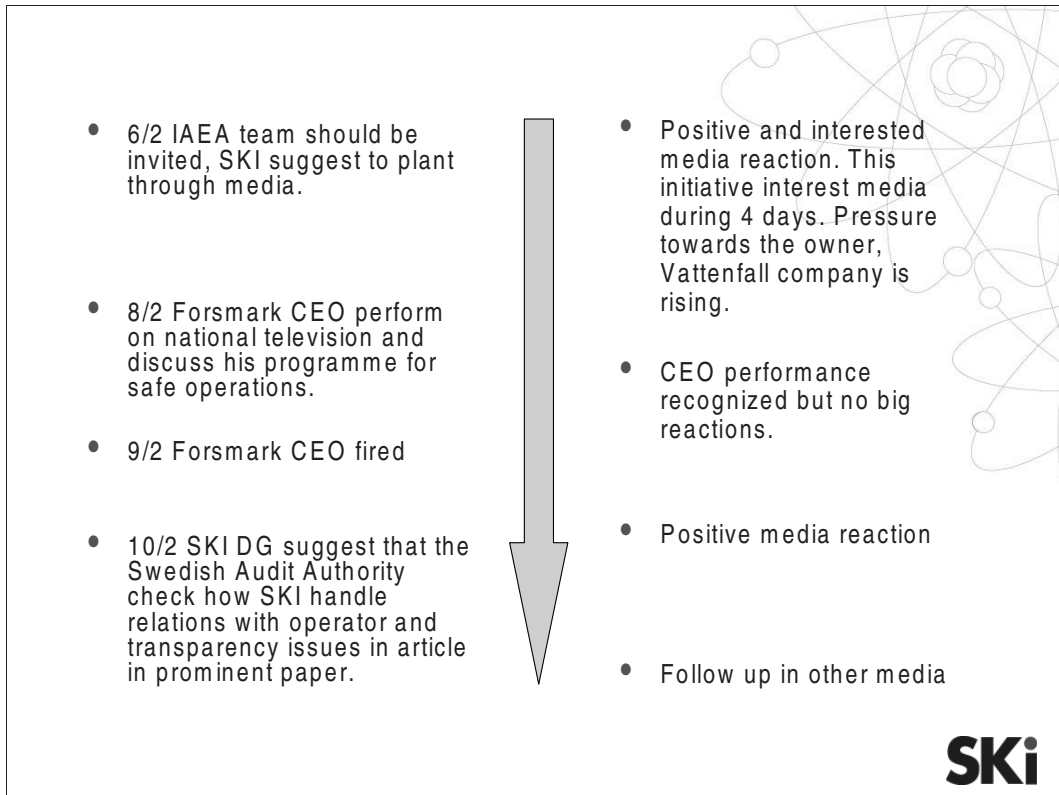
SKI

- 31/1 DG of SKI to minister of environment and they have a press conference together.
- Politicians call for international review of the swedish regulatory system and the safety of the plants.
- 2/2 A test tissue of a rubber sealing show ageing. Reactor 1 and 2 in Forsmark close late Fridaýnight 2nd of February.
- Forsmark 1 is found to have been operating with a bad rubber sealing between drywell and wetwell. F2 OK.

2007

- Fairly successful in explaining regulatory work. Minister of enviroment support SKI strongly.
- SKI find a god shorttime handling but has concerns about maintenance. Big media impact

SKI



COMMUNICATION REGARDING THE THORP EVENT

Dr. Peter Storey

Head of Research, HSE/NSD, United Kingdom

Abstract

HSE investigated the circumstances of the leak of highly radioactive product liquor inside the cell of the THORP plant at Sellafield which went undetected for a period of approximately 9 months between 2004 and 2005. The leak resulted in 83 000 litres of the liquor being deposited on the floor of the cell and although all indications are that none of this liquor escaped into the ground and no-one was harmed, it did attract considerable media attention.

HSE's Nuclear Safety Directorate instigated its own investigation which resulted in enforcement action being taken. BNG Sellafield was charged with 3 offences under the Nuclear Installations Act 1965, pleaded guilty and was fined £500k in Crown Court in January 2007.

The incident was categorised as "3" on the International Nuclear Event Scale and attracted a lot of attention in this country and abroad. The event is useful in illustrating the difficulties in handling communications related to a high hazard nuclear site which even in normal operation can attract considerable attention. The role of the safety regulator is considered. It is proposed that communications issues can be grouped in to three distinct areas;

- Early information by the licensee on the incident, status of the plant etc. which would be aimed at the public and media.
- Ministerial reporting and as a result reporting to OGDs and our responsibility to early notify our international neighbours.
- Lessons learnt from the event which in this case are fed back to the industry through an HSE openly published report.

This presentation covers each type of communication in the context of this event and draws conclusions on what can be considered good practice and what are some of the difficulties which may need to be overcome.

INES Level 3 Definition



- Off-site – very small release, public exposure at a fraction of prescribed limits
- On-site – severe spread of contamination/acute health effects for workers, defence in depth degradation – near accident, no safety layers remaining

INES Emergency Preparedness



- Rapid communication to media and public
- Events classified on a scale of 1 to 7
- Ease common understanding
- Civil nuclear industry, sources and transport
- Participating countries set up own structure

IAEA Website – “THORP INES”



- No workers or public affected
- Criticality not possible (NII)
- Plant in safe state, no harm (NII)
- Normal regulatory controls and powers cover the event and its recovery (NII)
- Liquor has been retrieved
- NII conducting an investigation

IAEA Databases – Selected “News Headlines”



- “Huge radioactive leak closes THORP”
- “Accident brings THORP to brink of early closure”
- “No danger to Ireland... .”
- “Situation within THORP remains safe and stable (BBC)”
- “Nuclear unit closed after checks (BBC)”

Lessons Learnt and Messages to Industry



- High standards are expected of the nuclear industry
- No degradation of protection barriers
- Industry leaders and managers seek sustained excellence in operation
- HSE will use available levers to secure expected safety standards
- Lessons learnt will be shared across nuclear and major hazards industries

DISCUSSION ON COMMONALITIES AND DIFFERENCES IN REGULATORY PRACTICES

Dr. Peter Storey

Head of Research, HSE/NSD, United Kingdom

Environmental Factors



- Post-trust Society
- High Public Expectation
- Freedom of Information
- Change in Industry
- Security Concerns
- Sensitivity to nuclear power and waste

Stakeholder Confidence



- Reputation
- Credibility
- Responsiveness
- Regulatory Excellence
- Earned Trust based on values

Regulatory Values



- Integrity
- Independence
- Impartiality
- Honesty
- Fairness
- Humility
- Openness and Transparency

Public Communications During Abnormal Situations, WGPC



- Preparedness
- Timeliness
- Comprehensiveness and Transparency
- Coordination
- Local and National Concerns
- Diversity of Tools
- International Cooperation

Addressing Future Challenges



- Stakeholder Trust at Heart of Regulatory Effectiveness
- Learning from the Past
- Establishing a Framework for Change
- Engaging Staff, & Changing Culture

SESSION 5

METHODS FOR EVALUATING TRANSPARENCY

Chair: Dr. József Rónaky, Director General, HAEA

Co-Chair: Ms. Elizabeth Hayden, NRC

CHAIR'S KEYNOTE SPEECH
METHODS FOR EVALUATING TRANSPARENCY

Mr. József Rónaky
Director-General, HAEA, Hungary

Transparency

- Required by law in most countries
- Different meanings in different countries
- Can transparency be measured?
- Is it equal to being known?

Public Information

- Among the key duties of regulatory bodies
- The goal is to make the regulatory body known and recognised as a legitimate and credible organisation with high expertise that is able to guarantee efficient, impartial supervision of nuclear activities and thus to protect public health
- The effectiveness of public information depends to a large extent on the ability to disseminate information, to involve other stakeholders and to report on the actions of the organisation.

Methods for Evaluating Transparency

- Opinion surveys are used to indicate the extent of public knowledge on the existence and activity of the regulatory body
- Other methods depending on the communication channels

Communication channels and effectiveness

- Indirect communication through the media
 - Press releases, press conferences
 - Indicator: number of media interests, appearance in media
 - Seminars organised for journalists
 - Indicator: number of journalists or test results
 - Reports, newsletters etc. disseminated to the media
 - Indicator: number of copies

Communication channels and effectiveness

New direction

- Direct communication with different target groups of the public
 - Website
 - Public hearings
 - Public conferences
 - Open house
 - Indicator: number of visitors or participants

Example for reaching new target groups

- Open House at the HAEA during the Cultural Heritage Days

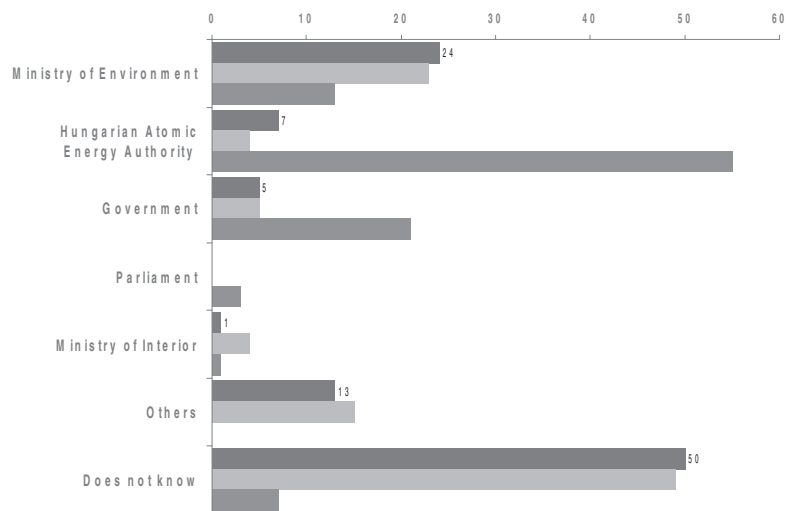


Example for reaching new target groups

- Public conferences on basic knowledge of nuclear energy organised in cooperation with the Association for Disseminating Scientific Information in

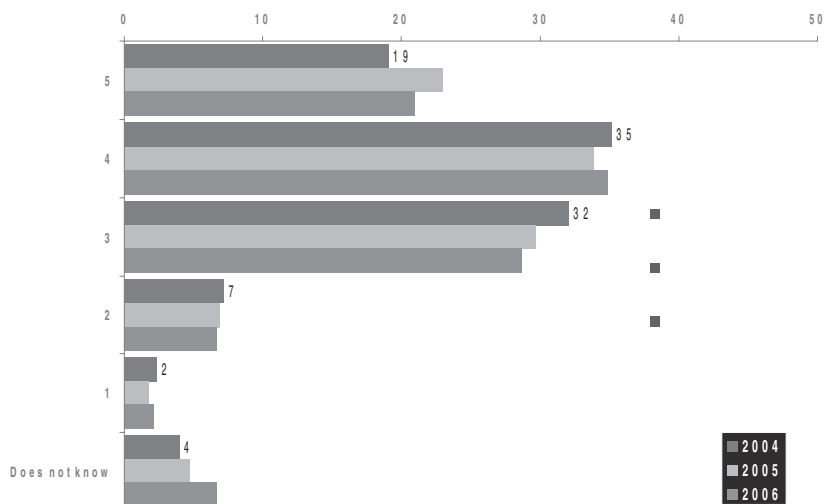


Example of an opinion survey



Which governmental organisation is responsible for the regulation in nuclear safety? (directed answer in 2006)

What do you think how effective is the regulation and control of nuclear safety in Hungary?



The importance of effective public communication

- ❑ Eurobarometer on nuclear safety
The acceptance of nuclear energy depends on the knowledge of people
- ❑ Quality award in public administration
Customer satisfaction is a key factor
- ❑ Cooperation and sharing methods
Improve effectiveness and recognition

CANADIAN PERSPECTIVES IN EVALUATING TRANSPARENCY

Ms. Laurel Herwig

Director, Strategic Communications, CNSC, Canada

Abstract

The Canadian Nuclear Safety Commission's mission is to regulate the use of nuclear energy and materials to protect the health, safety, and security of Canadians and the environment, as well as to respect Canada's international commitments on the peaceful use of nuclear energy. In 2001, the CNSC established a vision to be one of the best nuclear regulators in the world and established four strategic priorities of effectiveness, transparency, excellence in staff, and efficiency.

While fulfilling a very comprehensive mandate, the CNSC operates with a very clear vision of its clientele – the Canadian people. That commitment guides every employee and every action of the CNSC and ensures a firm commitment to transparency.

The presentation will begin with a brief overview of the worldwide context of transparency and transparency measurement, with a look at what lessons can be learned from other organizations and initiatives. It will look broadly at the Canadian context and the government framework that establishes transparency, including the keystone legislation of the *Access to Information Act*.

The presentation will then focus on the Canadian Nuclear Safety Commission. The CNSC is firmly committed to putting additional measures in place to ensure transparency, which is being done concurrently with an overall organisational performance measurement system. It is within this framework that the presentation will address the transparency efforts at the CNSC as well as transparency measurement activities. And, finally, the presentation will look at future directions for transparency and its measurement at the CNSC.

Good afternoon,

It is my pleasure to talk to you again, this time about the importance of transparency and transparency measurement. The move towards greater transparency is happening worldwide, in all sectors. Stakeholders, governments and the general public are demanding transparency, and a proper evaluation of transparency can result in a solid foundation which will encourage the principles of good governance.

There is no single method of evaluating transparency so I cannot provide you with any simple solutions in speaking to you today.

Today, I am going to present to you some of the lessons to be learned from around the world, and outside of the field of nuclear regulation, with respect to transparency and its measurement. I will focus on transparency in Canada, and then finally, within my own organization, the Canadian Nuclear Safety Commission.

Since I spoke to you at length yesterday about the CSNC I won't repeat that information (see Session 3: Transparency: The Canadian Nuclear Safety Commission's Public Hearings and Meetings).

The mandate of the CNSC is very broad. There is only one nuclear regulator in Canada and the CSNC deals with all aspects of nuclear energy. As a result, we have one of the broadest licensing bases in the world.

The CNSC has a vision to be one of the best nuclear regulators in the world. In order to achieve this vision, the organization committed, in 2001, to four very important strategic objectives:

- effectiveness;
- transparency;
- staff excellence; and
- efficiency.

As you can see, the CNSC has committed to transparency, among other things, in order to achieve its vision.

I'd now like to look at transparency measurement in a global context. There does not exist one "standard" or one definitive benchmark with regards to transparency.

The field of transparency measurement is very sector driven. Each sector has developed one, or several, sets of indicators, some vastly complex and exhaustive, and others which only provide the barest of measurements. Transparency is not just a government issue – the private sector is also adopting transparency measures.

Some of the sectors which are leading transparency measurement are the so-called "extractive industries" which include mining and forestry industry. Other players include revenue and budget administration, international finance and investment markets. It is no coincidence that the sectors leading this field are those in which a lack of transparency has proven disastrous.

A number of organisations are making progress in the development of transparency indicators. I understand that the OECD has a number of different projects involving the development of transparency indicators. The organisation Transparency International, with national branches all over

the world, including Canada, has developed a number of transparency indexes. The World Bank and the International Monetary Fund have both developed transparency and governance measurement indexes. The UN is also heavily involved in the development of transparency measurement.

Finally, many international investment companies are very involved in transparency measurement.

There are three transparency initiatives of which I would like to make particular mention. First, the Centre for Public Integrity in Washington, DC has developed the Global Integrity Index which is a comprehensive list of transparency indicators. ENTNEA – which stands for Enhancing Nuclear Transparency in NE Asia – is an organisation focusing solely on transparency in nuclear regulatory matters for South Korea, North Korea, China and Russia. And finally, Save The Children, a UK-based NGO, which leads the world in the promotion of transparency and the development of transparency indicators, especially with respect to mining and forestry.

If you are looking for more information on transparency measurement, you might want to refer to these organisations on the internet.

It is a given that transparency must be evaluated according to the type of market economy. In addition, the type of performance indicator is also driven by the stakeholders who are demanding transparency. However, a basic framework can work for all economies.

When developing a transparency measuring framework for transparency initiatives, there are generally three goals:

- Design credible standards for action to support transparency;
- Measure progress, identify best practices, and show others how they can improve; and
- Create a mechanism so that performance can be measured over time.

Most of the models already developed have these three goals as their basis.

From a regulatory perspective, the Open Government Project (OGP) is one of the few transparency initiatives which specifically addresses regulatory transparency. The OGP is a centralised repository designed to inform, educate and unite people searching for answers to transparency questions.

One of the first steps the OGP took was to develop a list of “best practices” by which regulatory agencies could measure their own transparency. There are nine basic best practices for organisations working in a regulatory environment:

- **Notice and comment:** The public should be given a reasonable amount of time before new or revised regulations are implemented to comment on, understand, and take steps to comply with the changes.
- **Systematic reliance on public consultation:** There should be a mechanism for receiving and assessing comments from the public about proposed and current regulations.

- **Accessibility:** Current and proposed regulations should be easily accessible in writing and on the internet. Government sponsored meetings should be held regarding proposed or current regulations and these should be open to the public.
- **Clarity of requirements:** Applications for licensing should clearly state all requirements.
- **Impartial, reliable, and timely action by government agencies:** Licenses or applications must be justified strictly on the basis of factors explicitly identified in the regulations.
- **Simplicity and affordability of licensing process:** Licensing decisions should be made promptly and the licensing fees should not be excessive.
- **Regulatory enforcement:** This is a very familiar requirement to most of us.
- **Regulatory impact assessment statements:** Regulatory impact assessments that include a cost/benefit analysis should be required for all proposed and existing regulations.
- **Transparent and effective administrative remedies:** An effective and responsive complaints system should be implemented for those who wish to file complaints alleging discrimination, arbitrary actions by officials, delays in licensing proceedings, or other discrepancies in administrative procedures.

These indicators would form a sound basis for any regulatory body to begin building a transparency measurement initiative.

The move to more transparent organisations has been a response to global events, most notably in the financial sector. Collapse of international companies like WorldCom and Enron have prompted stakeholders in many sectors to demand transparency in the companies in which they invest. The public is also demanding transparency and accountability for the way in which their tax dollars are spent.

But, one could argue, isn't it enough to be transparent? Is it really necessary to measure that transparency?

The answer is yes.

John E. Jones, a US federal judge, once said, "What gets measured gets done; what gets measured and fed back, gets done well ..."

To take Jones' quote further, we must equip ourselves with better systems for evaluating the actions of government so that we can genuinely answer for our actions, first and foremost to the public. Without measurement there is no accountability.

Without the accountability of measurement, there can be a loss of public confidence in our regulatory competence.

What is the status of transparency and transparency measurement in Canada?

Canada has a national framework which promotes transparency within the Government of Canada. The framework is made up of two main sectors: governmental measures, and civil society measures.

First, the governmental measures:

There is a solid network of enabling legislation which supports transparency in the Government of Canada. The most important of these, and the basis for all transparency within the Government of Canada, is the Access to Information Act which came into effect in 1983, over twenty years ago. Freedom of information laws have been the backbone of transparency initiatives worldwide, because such laws have the potential of changing the way citizens relate to their governments.

Twenty years ago, only ten OECD countries had laws which specifically guaranteed the rights of citizens to access information from public institutions. Today, over 50 countries have adopted comprehensive freedom of information laws and over another 30 having pending efforts.

Other Canadian legislation that supports transparency includes the Corruption of Foreign Officials Act, the Financial Administration Act, the Privacy Act, and the new Accountability Act.

Canada's new Accountability Act is a direct result of an inquiry held in Canada – called the Gomery Commission after the retired federal judge who presided over the inquiry. The Gomery Commission investigated irregularities in Canada's Sponsorship Program. The Sponsorship Program was a federal government advertising campaign whose purpose was to promote national unity and the profile of the federal government. The irregularities being investigated related to the awarding of contracts and the transfer of funds to private marketing companies. When the Commission was over, Justice Gomery's report had numerous recommendations, some of which were contained, and enacted, with the Federal Accountability Act in 2006.

In addition to legislation, there are many institutions within the Government of Canada whose activities also support transparency, including the Office of Access to Information and Privacy, and the Auditor General of Canada.

Policies and procedures within the Canadian government also create an environment which supports and promotes transparency. Some of these include regulatory policies, consultation policies, communications policies, and proactive disclosure policies on government spending.

With regard to Canadian civil society measures, there are several institutions and structures in Canada which support both transparency and transparency measurement. These include – obviously – the media, as well as professional associations and their ethical standards, some of our international development agencies, the Canadian branch of Transparency International and a number of ombudsman offices for departments such as National Defence.

All of these organisations and networks act to monitor and hold the Canadian government accountable to the Canadian public and serve as a means to educate the Canadian public regarding issues of corruption.

So what about transparency at the CNSC?

The goal of transparency has been part of the CNSC's strategic objectives since 2001.

The policy of the CNSC is to be transparent on regulatory matters so that Canadians do not need to use the formal access-to-information process to obtain information.

Our transparency efforts at the CNSC have included:

- The Commission Tribunal processes (as described in Session 3) including detailed reasons for licensing decisions.
- Complete and public documentation for all hearings and meetings.
- A public website which aims to provide as much information on our regulatory and decision-making process as possible.
- A public inquiries system.
- A library which is open to the public.
- Various public outreach activities, such as town hall meetings, meetings with industry and other stakeholders, consultation for environmental assessments, publication of an annual industry report and midterm reports on the performance of nuclear power plants.
- The President of the CNSC broadly and proactively distributes its Annual Report which discusses the organisations performance over the past year.

How is the CNSC doing in terms on evaluating transparency? Like many nuclear regulators, we still have a way to go.

However, we have a number of mechanisms in place.

First, methods for auditing – both internally through the CNSC’s Audit and Ethics Group and externally by the Office of the Auditor General – are in place, as well as systems for the disclosure of travel expenses, hospitality and contracts.

The CNSC has requested an independent assessment of our regulatory programmes through the IAEA’s International Regulatory Review Service, results of which will be publicly available.

The CNSC undertakes regular cycles of stakeholder and public opinion research to evaluate the success of our work in promoting transparency.

The CNSC is also establishing a corporate-wide quality management system based on IAEA safety standard GS-R-1. This will allow the CNSC to compare and benchmark our practices in many aspects of corporate performance, including transparency.

Our work with international agencies and our international counterparts – such as this workshop today – is yielding benefits.

It puts us in an ideal position to benchmark our regulatory framework against the knowledge and practices of the best in the world.

I’d like to draw some conclusions on transparency efforts and evaluation.

Recent years have seen a greater focus placed on the importance of regulatory transparency, with many countries embracing this, each in their own way that is appropriate for their own context.

Based on the sharing of experience and lessons learned amongst regulators, each of us focuses on specific opportunities to improve our transparency and then to measure it.

While the Canadian approach will use domestic and international practices to benchmark, and then to improve our efforts with regards to transparency, our overall transparency measurement efforts have to fit within our corporate efforts to evaluate performance in all areas of our operation.

As I mentioned at the beginning of this presentation, what gets measured gets done, and the CNSC is committed to doing just that.

Thank you for the opportunity to speak to you this afternoon.

*prepared by Karen Colvin
Senior Communications Advisor, CNSC*

OPINION SURVEY ON ASN AWARENESS AND IMAGE

Mr. Luc Chaniel

Deputy Secretary General, ASN, France

Abstract

Informing the public is one of ASN's key duties, which has been confirmed by each institutional reform of the civil nuclear activities supervision in France. This duty has been broadened to take into account all areas of competence covered by ASN, in line with its changing role.

The last change in this field is the passing of the 13th June 2006 law on transparency and security in the nuclear field (called "TSN" law). The TSN law constitutes an in-depth overhaul of the legislative framework applicable to nuclear activities and their supervision. It gives ASN the status of an independent administrative authority in charge of supervising nuclear safety and radiation protection and responsible for informing the public on these subjects. The role entrusted to ASN by the TSN law, in particular in the field of information, is not therefore a new one but a broader one.

ASN's goal is to guarantee efficient, impartial, legitimate and credible supervision of nuclear activities, recognised by the citizens and regarded internationally as a benchmark for good practice. ASN considers that to be recognised by the citizens as being legitimate and credible needs to inform, associate and report. This to a large extent depends on its ability to disseminate information, to involve other stakeholders and to report on its actions. ASN considers also that to be recognised implies first to be known.

For this reason and in order to better understand what are the risk perception in France and the perception of ASN by the general public, ASN launched in 2003 a qualitative opinion study. The purpose of this study was to get some trends to perform later on a more comprehensive and detailed opinion survey to help ASN to better know the needs and the expectations of the French public and help it in its communication strategy.

On the basis of the first main results of this preliminary study (nuclear risk in France is not in the first rank of the most dreaded events, there is a limited confidence in the State and its actions in the field of nuclear activities, ASN is not very well known except by nuclear professionals and by the opinion relay), ASN created in 2005 together with a poll institute (TNS SOFRES) a profile and image

barometer. This barometer is designed to quantify the ASN’s recognition level and the degree of satisfaction of the various audiences at whom its information actions are targeted.

The second wave of this opinion survey was conducted in October and in November 2006. This wave, as the first one in 2005, was conducted with a representative sample of the general public and with a sample comprising essentially journalists, elected officials, association managers, administrative managers, information local committees, chairmen, health professionals and teachers, representing the well informed public.

The second wave revealed an increase in the profile of ASN among the general public: 21% (versus 16% in 2005) of respondents recognise the name ASN and are sure of the existence of a nuclear supervision organisation in France. General public clearly identifies among ASN duties nuclear facilities and activities supervision: 74% of respondents versus 75% in 2005. This public is more aware about ASN regulation duty than in 2005: 13% of respondents versus 8% in 2005. Only 4% of respondents (as in 2005) are aware of ASN information duty.

Among the well informed public, overall recognition of ASN reaches a high level : 63% of respondents (versus 61% in 2005) recognise the existence of a nuclear supervision organisation in France. 87% (versus 80% in 2005) of the respondents among the well informed public identify ASN supervision duty. 29% of respondents (versus 30% in 2005) are aware of ASN regulation duty. The ASN public information duty is also better perceived by the well informed public: 21% of respondents versus 13% in 2005.

| | General public | | Informed public | |
|---------------------------------------|----------------|------|-----------------|------|
| | 2005 | 2006 | 2005 | 2006 |
| Overall recognition of ASN (%) | 16 | 21 | 61 | 63 |
| Supervision duty (%) | 75 | 74 | 80 | 87 |
| Regulation duty (%) | 8 | 13 | 30 | 29 |
| Information duty (%) | 4 | 4 | 13 | 21 |
| | | | | |

ASN considers these results as being encouraging in particular regarding the level of ASN recognition by the public. These results have surely to be consolidated.


It may be difficult and hazardous to try to give the right explanation to the increase in some of these results. In the field of public information and communication, ASN considers the year 2006 was marked by the passing of the TSN law, the overhaul of the ASN website www.asn.fr, the declaration of an important number of radiotherapy accidents and incidents with serious medical consequences leading ASN to have regularly and occasionally extremely intense relations with the press and to be more visible, the emergence of projects to build new nuclear installations involving debates. All these events, among others, had surely consequences on ASN visibility and profile.

ASN has been developing for many years its actions in the field of communication and information of the public in order to provide specific information as simple and comprehensive as possible, and which is accessible to the majority. To do this, ASN uses a variety of media (www.asn.fr website, “Contrôle” magazine, annual report, information sheets, public information and documentation centre, and so on) and organises a number of national and regional events (press conferences, symposia, seminars, travelling exhibition, etc.) to inform the public, opinion shapers, environmental protection associations, elected officials, etc. ASN also regularly reports on its activities.

The IRRS international audit of ASN in November 2006 confirmed the high level achieved by ASN with regard to public information and stated that its actions in this field represented “good practice” and an international benchmark.

ASN will periodically launch this opinion barometer. Its first aim doing this is to adapt its information policy both locally and nationally and help it to better inform. The recent change of the ASN status needs also to be explained to and understood by the public.

The opinion barometer will contribute to raise the profile of the new ASN, to strengthen its credibility and legitimacy and will enable it to be perceived by the citizens as an impartial and independent body in charge of supervising nuclear safety in France.



Contents

- Context and objectives
- Method applied
- Main results
- Conclusion
- Outlook

Tokyo 22-24 May 2007

OECD/NEA Workshop on "The Transparency of Nuclear Regulatory Activities"

2
Luc CHANIAL /ASN-France



Context and objectives

- In 2003 ASN launched a specific study to better understand and get some trends about
 - the risk perception
 - the perception of ASN by the public in France

- The purpose was to have some inputs to
 - Help ASN in its communications strategy aimed at
 - ✓ general public
 - ✓ more informed public
 - Give ASN the right perception of the needs and expectations of the public



Context and objectives

- In this context ASN decided in 2005 to launch an opinion survey
 - ASN created an awareness and image barometer designed to quantify the ASN's recognition level and the degree of satisfaction of the various audiences at whom its information actions are targeted
 - ASN contracted with a pool institute (TNS SOFRES)
 - The 1st wave of this opinion survey was conducted between September and October 2005
 - The 2nd wave was conducted between October and November 2006



Method applied

- Two targets were chosen
 - A sample representative of the general public (2022 people)
 - A sample representative of the well informed public (309 people)
 - ✓ journalists
 - ✓ elected officials
 - ✓ association managers
 - ✓ administrative managers
 - ✓ information local committees chairmen
 - ✓ health professionals
 - ✓ teachers
 - ✓ ...



Method applied

- All people have been interrogated through phone or direct contacts
- More than 40 questions were asked to the 2 targets
- The questions were quite similar between the 2 waves even if some questions connected to the ASN statute change were added in 2006



Method applied

- Contents of the study
 - Nuclear matters
 - Nuclear facilities and activities supervision
 - ASN awareness
 - Effectiveness of the information provided by ASN
 - Assessment of the ASN performance



Main results

Context

- In France
 - October 2006 : radiotherapy accidents at Epinal hospital
 - June 2006 : act no. 2006-686 of 13 June on nuclear transparency and safety
 - November 2006 – May 2007: the presidential election campaign



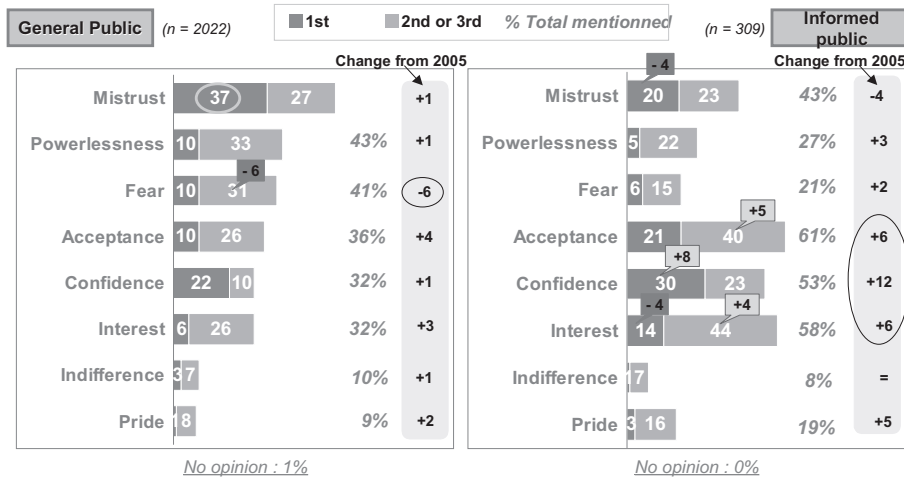
■ Abroad

- The Iran crisis and aggravation of tensions
- October 2006 – February 2007: easing of the nuclear crisis with North Korea
- November 2006 : the death in London of Alexander Litvinenko (Po 210)



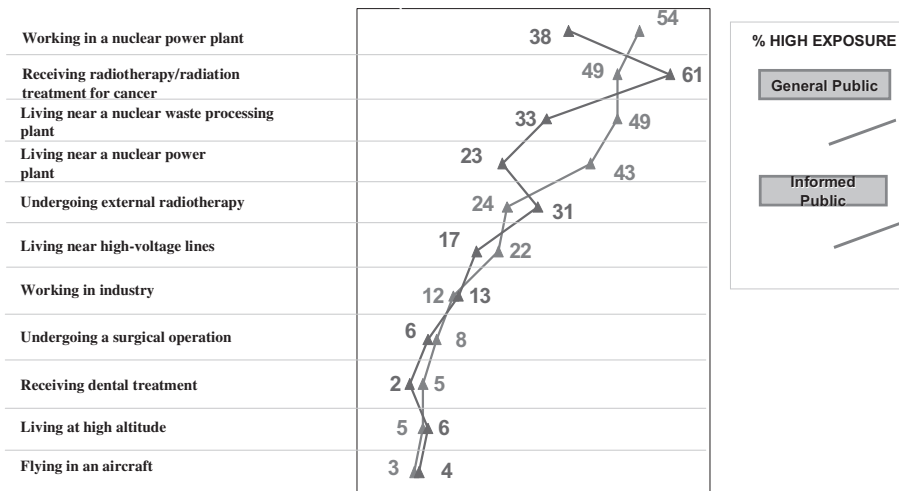
■ State of mind with regard to nuclear safety in France

C1 I am going to list various feelings. Tell me which three correspond best to your state of mind when nuclear safety in France is mentioned. Rank them as 1st, 2nd and 3rd best. (base: all)



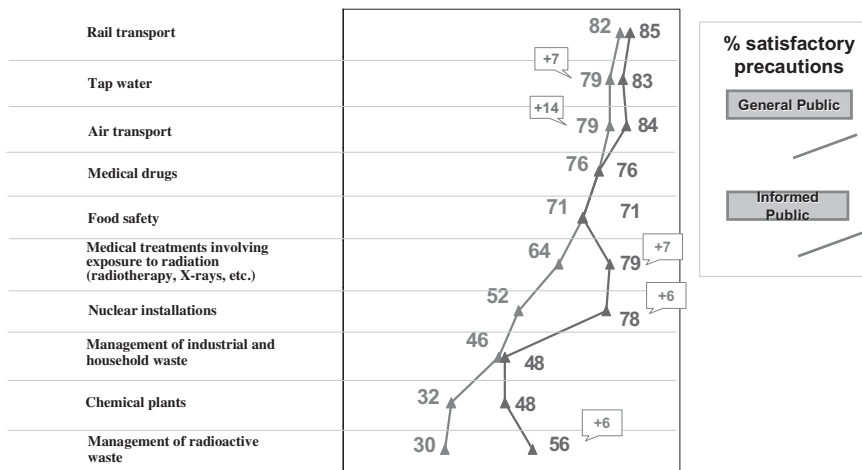
Degree of exposure to radioactivity

M3 In your opinion, is exposure to radiation or radioactivity high, low or zero in the following situations? (Base : all)



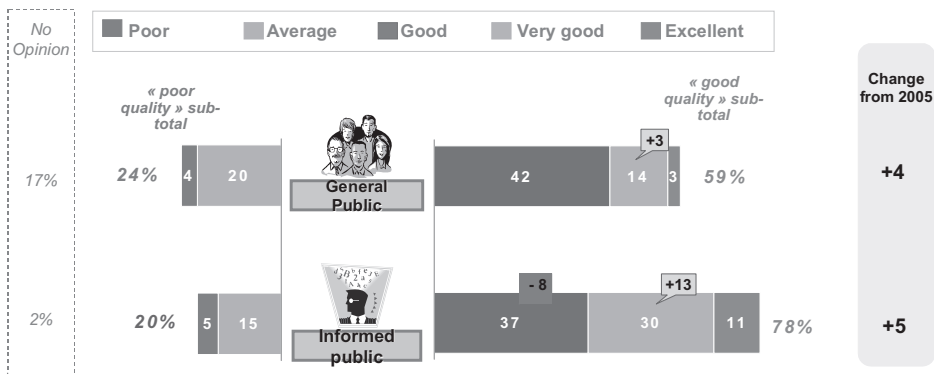
Satisfaction with regard to levels of precaution

M1 Do you think that, in each of the following areas, the precautions taken to guarantee public safety and consumer health are very satisfactory, fairly satisfactory, fairly unsatisfactory or completely unsatisfactory? (base: all)



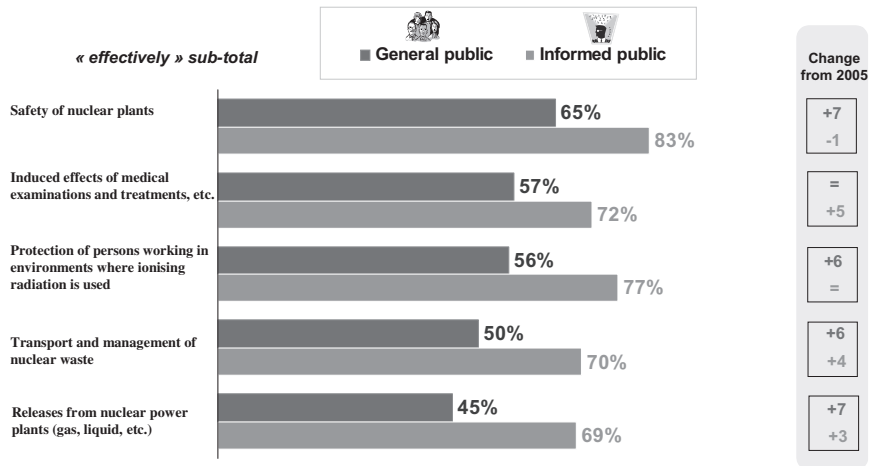
Quality of nuclear safety supervision

C4 Would you say that the quality of the monitoring of nuclear safety and radiation protection in France is excellent, very good, good, average or poor? (base: all)



Overall effectiveness of the French authorities

M4 In general, do you feel that the French authorities monitor the following areas effectively, fairly effectively, not very effectively or ineffectively? (Base: all)



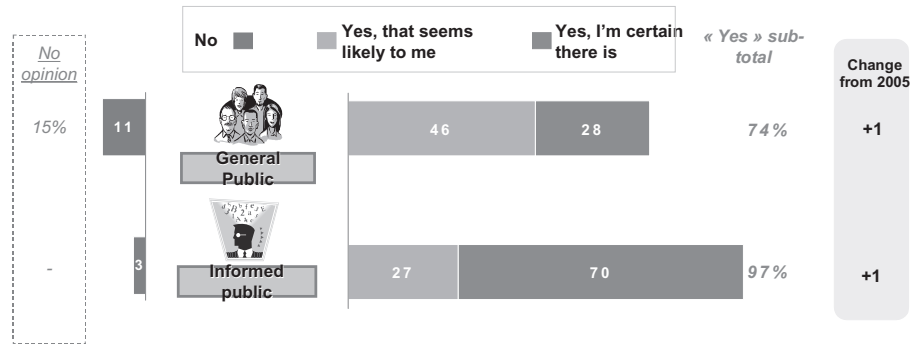


Main results

ASN awareness

■ Knowledge of a state body responsible for nuclear supervision

B1 In your opinion, is there a state body responsible for nuclear monitoring in France? (base: all)



Main results

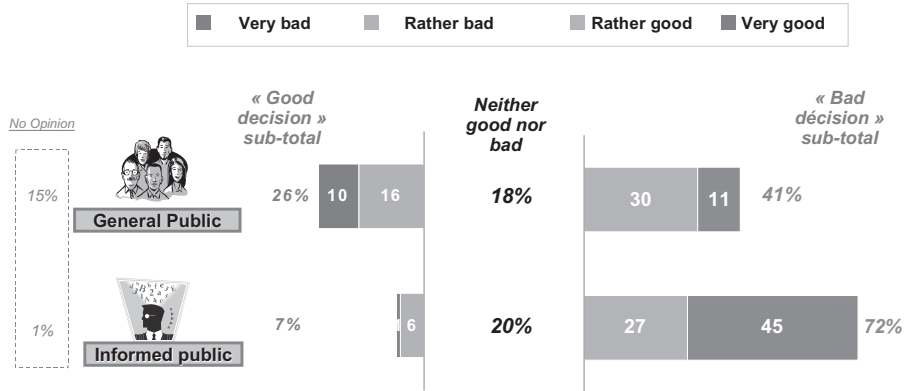
ASN awareness

■ ASN awareness

| in % | General Public | | Informed public | |
|--|----------------|------------------|-----------------|------------------|
| | Value | Change from 2005 | Value | Change from 2005 |
| Are aware of the existence of a state body responsible for nuclear supervision | 74 | +2 | 97 | +1 |
| - Mention ASN spontaneously | 2 | +1 | 11 | +4 |
| - Know of ASN when prompted | 19 | +4 | 52 | -2 |
| « Know ASN » sub-total | 21 | +5 | 63 | +2 |
| « Do not know ASN » sub-total | 53 | -4 | 34 | -1 |
| Are not aware of the existence of a such body | 26 | -1 | 3 | -1 |

Opinion on the independence of ASN

B8 The nuclear safety authority (ASN) has become an independent authority, no longer reporting to any ministry. Do you think this decision to change its status is... ? (base all)



ASN missions

B4 In your opinion, what are the different missions of ASN ? [open question] (base : those who know ASN)

| in % | General Public | | Informed public | |
|---|----------------|------------------|-----------------|------------------|
| | (n = 425) | Change from 2005 | (n = 194) | Change from 2005 |
| « Supervision » sub-total | 74 | -1 | 87 | +7 |
| « Regulation » sub-total | 13 | +5 | 29 | -1 |
| « Information » sub-total | 4 | = | 21 | +8 |
| « Missions which are not ASN missions » Sub-total | 2 | = | 7 | +5 |
| Other | 1 | -4 | 3 | -2 |
| No answer | 19 | -2 | 7 | -2 |

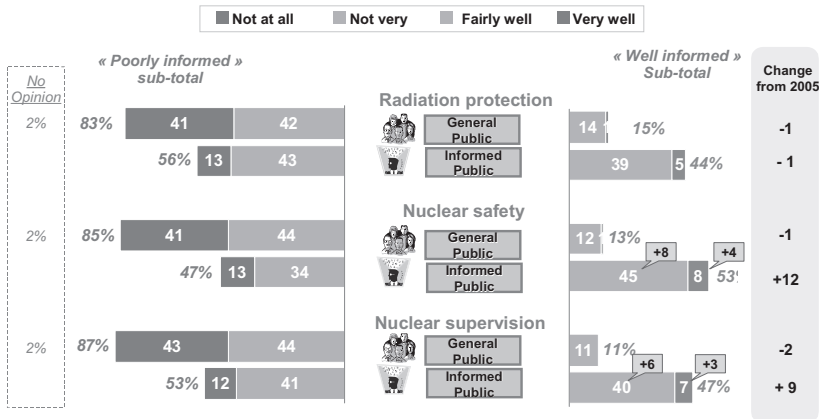


Main results

Effectiveness of the information provided by ASN

Information levels

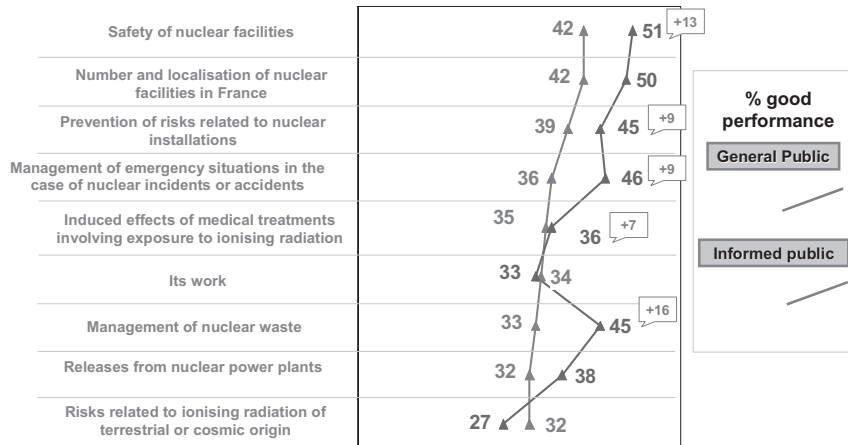
C5 Do you feel very well, fairly well, not very or not at all informed about... ? (base all)



Main results

Effectiveness of the information provided by ASN

ASN performance with regard to its capacity to communicate





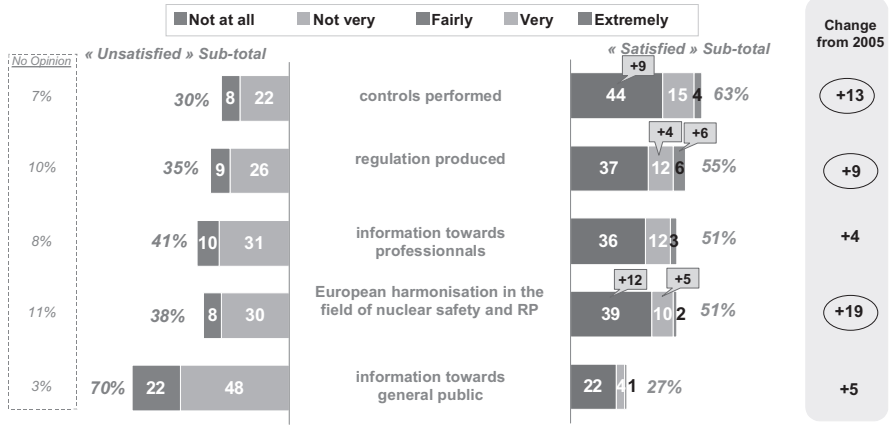
Main results

Assessment of the ASN performance

Level of satisfaction with the ASN work

E1 More specifically, within the context of your work, how satisfied are you with the work of the ASN, the body responsible for supervising nuclear safety and radiation protection, with regard to...?

Base: persons who know of the ASN



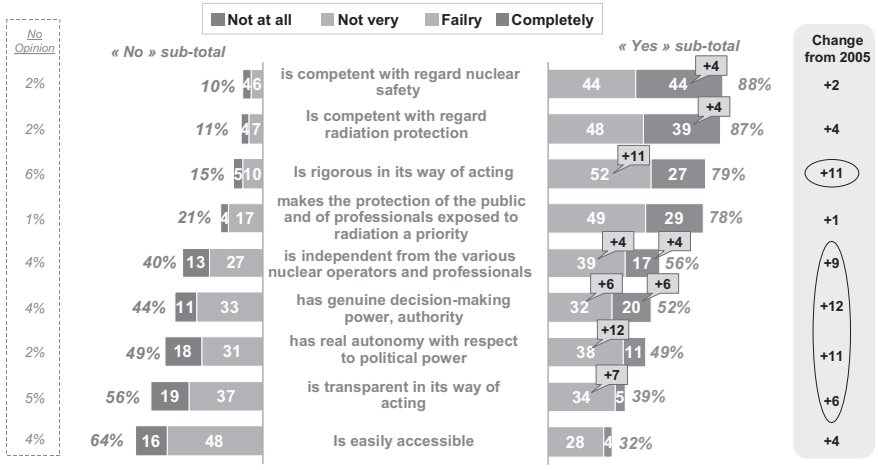
Main results

Assessment of the ASN performance

ASN image

E2 Would you say that ASN ... ?

(Base : à ceux qui connaissent ASN - n = 194)





- Better results in 2006 compared to 2005

| | General public | | Informed public | |
|--------------------------------|----------------|------|-----------------|------|
| | 2005 | 2006 | 2005 | 2006 |
| Overall recognition of ASN (%) | 16 | 21 | 61 | 63 |
| Supervision duty (%) | 75 | 74 | 80 | 87 |
| Regulation duty (%) | 8 | 13 | 30 | 29 |
| Information duty (%) | 4 | 4 | 13 | 21 |

- These results have surely to be consolidated.
- ASN considers them encouraging in particular regarding the level of ASN recognition by the public.
- It may be difficult and hazardous to try to give the right explanation to the increase in some of these results



- Appears to be calmer, less worried than in 2005 with nuclear matters
- The general public has greater belief in the effectiveness of the checks whereas in parallel the perceived level of information is not increasing
- The importance of being informed is decreasing on all topics relating to nuclear matters, even though the persons interviewed continue to maintain the importance of the nuclear issue



Conclusion The well informed public

- Shows renewed confidence in nuclear safety
- Is aware of the debates on nuclear safety
- ASN awareness has not increased markedly overall (63 %, + 2 %), but ASN is mentioned spontaneously more often (11 %, +4 %) as the body responsible for nuclear supervising in France
- Those who know of the ASN assess its work in a much more positive manner



Outlook

- ASN will periodically launch such an opinion barometer
- The recent change of the ASN status needs to be explained to and understood by the public
- This barometer has to be used in "a practical manner"



Outlook

- ASN's ambition is to ensuring efficient, impartial, legitimate and credible nuclear supervision, that is recognised by the citizens and perceived internationally as a benchmark for good practice
- The opinion barometer shall be a support to help ASN to reach this ambition
- But ... is such a barometer an adequate tool for evaluating the transparency level of the regulatory body ?... (☺)

ASSESSMENT OF TRANSPARENCY – FROM THE RESIDENTS’ VIEWPOINT

Mr. Yoshiko Arano

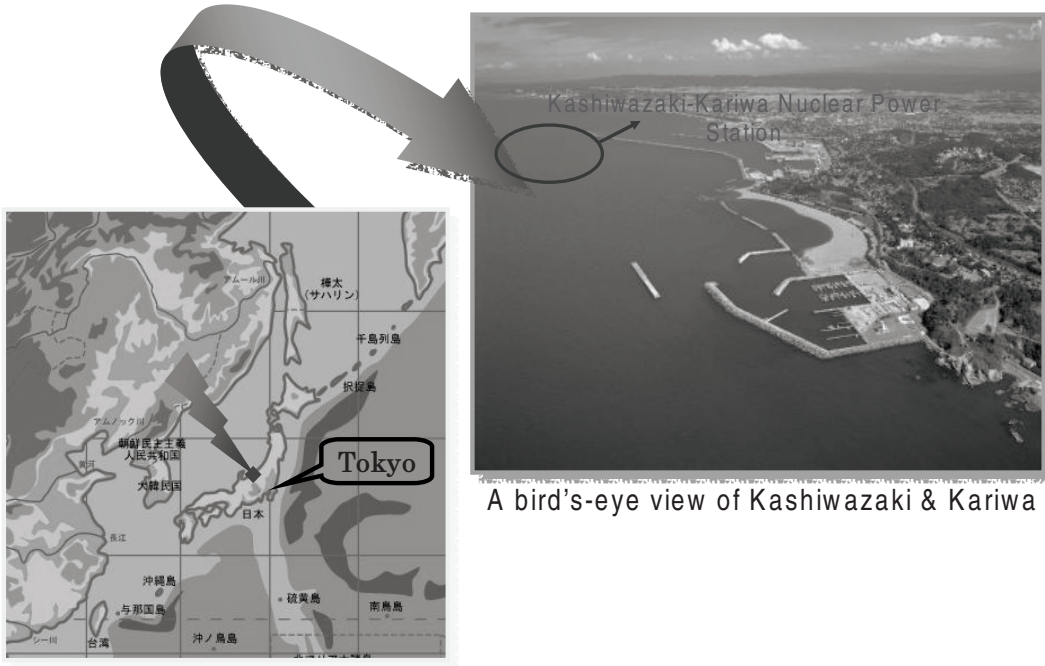
*Chair of Chiiki-No-Kai, Committee for Securing Transparency
of Kashiwazaki-Kariwa Nuclear Power Station, Japan*

Abstract

In this presentation, the activities of the “Regional Association for Securing the Transparency of Kashiwazaki-Kariwa Nuclear Power Station,” for which I myself serve as chairman, are introduced by way of showing a solid plan of action for appraising the transparency of the regulatory authority from the standpoint of the residents. First of all, the background and the process of the establishment of the Regional Association are explained after introducing Kashiwazaki City/Kariwa-mura, Niigata Prefecture, where the Regional Association takes an active part. Next, the contents of the Regional Society’s activities including the principal events thus far discussed are explained, and then aspects pertaining to how the activities have brought about change to the three parties, namely the operator, the state, and the Association itself, will be presented together with the *raison d’être* of the Regional Association.

Lastly, based on the above acknowledgement, the facts visualized through the activities of the Regional Association are explained, and we will make recommendations as to what is respectively expected of the enterprises, national government, local authority and the residents to ensure transparency related to nuclear safety from the standpoint of the residents.

Kashiwazaki City & Kariwa Village, Niigata Prefecture ①



Kashiwazaki City & Kariwa Village, Niigata Prefecture ②



Kashiwazaki-Kariwa Nuclear Power Station,
Tokyo Electric Power Company



Background of the Birth of “Chiiki-No-Kai”

- **July ~ Aug. 2002**
The village head (in July) and the city mayor (in Aug.) visited Europe to inspect MOX fuel manufacture.
Locals → A heated discussion between the pros and the cons of the site location of the pluthermal* plant.
- **Aug. 29, 2002**
Tokyo Electric Power Company made public the data falsification case.
- **Sept. 12, 2002**
Prefecture / city / village withdrew their prior consent to the pluthermal* project.
- **Dec. 2002**
Prefecture / city /village proposed the establishment of “Chiiki-No-Kai” (Refer to the annex.) for the purpose of securing the transparency of the power station.
(To analyze it as a possible measure of a new style for prevention of recurrence, which has been inspired by a French example observed during visits to Europe.)

* using MOX fuel in light-water reactor

In View of Establishing “Chiiki-No-Kai”

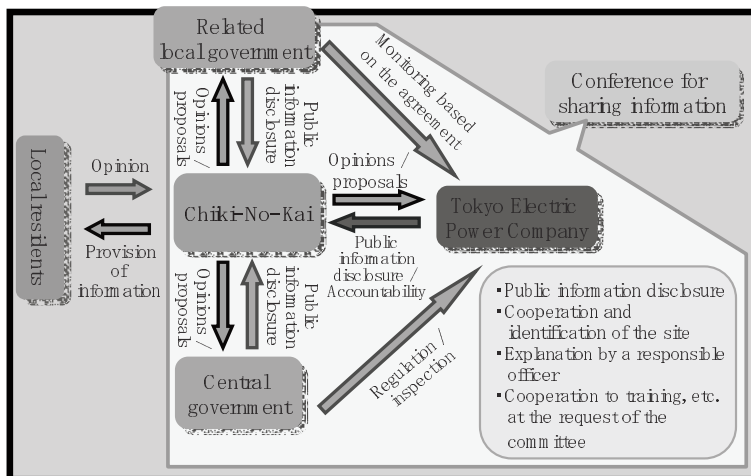
- Dec. 2002 ~ Feb. 2003
Preparatory meetings were held with an aim to make the committee a place for sharing information by residents of the standpoints of for / against / neutral as regards the power station.
- April. 2003
The preliminary meeting was held with the attendance of the new committee members.

- Not to ask whether you are for or against the power station itself.
- Not to have any authority. • Open to the public in principle.

【 Summary of “Chiiki-No-Kai” 】

- ① Members: The committee is to be composed of a maximum of 25 committee members residing in Kashiwazaki City / Kariwa Village, recommended by the organizations approved by the committee / regional community with a term of office of 2 years.
- ② Mission of the committee: Identification / monitoring of the state of operation of the power station, and its impact / proposals to the project operator / provision of information to the residents on the discussion and activities / training of the committee members.
- ③ Representatives of the prefecture, city, village and central government as well as the project operator attend the meeting as observers or elucidators.
- ④ Kinds of meetings: Regular meeting (once a month) / extraordinary meeting (to be held as required).

Establishment of “Chiiki-No-Kai”



May. 2003 Establishment of “Chiiki-No-Kai”
March. 2004 First Chair / Vice Chair elected

Operation of “Chiiki-No-Kai”

- Steering committee (now composed of 9 members)

- To study the particulars of the regular meeting.
- To edit the information magazine, “Shiten (Viewpoint)”.
- To put together proposals and statements of opinions.
- To examine the contents of the inspection and study meeting.



Major Events Involved in the Discussion

- Aug. 2002 Public release of the TEPCO data falsification case
- March. 2003 All reactors had been stopped in the Kashiwazaki-Kariwa Nuclear Power Station.
- Aug. 2004 An accident at the Mihama Nuclear Power Station of Kansai Electric Power Company
- Oct. 2004 Occurrence of the Great Chuetsu Earthquake (M6.8)
- June. 2005 Flood damage on June 28
- Oct. 2006 North Korea conducted a nuclear test.
- Nov. 2007 Falsification of the data of seawater temperature at the exit of the condenser
- Jan ~ March. 2007 Public release of the new cases of falsification of past data



**

** Monograph/54(2004) The Association for The Geological Collaboration in Japan

Particulars of the Activities of “Chiiki-No-Kai”

Inspection



Study meeting



Visit and study
(other plants & facilities)



Information magazine,
“Shiten(Viewpoint)”



Proposals / Opinions from “Chiiki-No-Kai”

- **Dec. 14, 2003** <to Nuclear and Industrial Safety Agency as well as Tokyo Electric Power Company>
Compilation of the opinions against the problem of foreign materials in the pressure suppression container for the nuclear reactor
- **June. 2, 2004** <to Nuclear and Industrial Safety Agency as well as Tokyo Electric Power Company>
Proposals based on the summary of opinions presented during the past year
- **April. 12, 2005** <to Nuclear and Industrial Safety Agency, local government and Tokyo Electric Power Company>
Looking back upon the past 2 years.
- **Aug. 26, 2005** <to Atomic Energy Commission>
Statement of Opinions and Studies on the Framework for the Nuclear Energy Policy (draft)
- **Feb. 1, 2006** <to Nuclear and Industrial Safety Agency, local government and Tokyo Electric Power Company>
After the inspection of the integrated nuclear disaster drill
- **March. 1, 2006** <to Niigata Prefectural Government>
Opinions on the Niigata Prefecture Residents Protection Plan (preliminary draft)
- **June. 22, 2006** <to Nuclear Safety Commission, Cabinet Office>
Opinions on the “Guidelines for the Earthquake Resistant Design for the Nuclear Reactor Facilities for Power Generation (Draft)” and “Views of the Special Committee on the Nuclear Safety Standards / Guidelines”
- **June. 12, 2006** <to Kashiwazaki City Government>
Demanding paper (Revival of the name of the Nuclear Division)
- **May. 9, 2007** <to Minister of Economy, Trade and Industry, and Tokyo Electric Power Company>
Demanding paper (Recovery of the lost trust in the Nuclear Power Policy)

Changes

Tokyo Electric Power Company

Expressed the determination for thorough public information disclosure.
To improve the internal quality assurance system.
To make efforts for the reform of the corporate culture.

Nuclear and Industrial Safety Agency (Central Government)

To largely improve the framework for the inspection system.
To reinforce the public relations system. → To establish a public relations officer.
To Revise the guidelines for earthquake resistant design assessment.

Chiiki-No-Kai

To deepen mutual trust among committee members.
To construct a place for cool-headed discussion.
To expect statements from every committee member.

Raison d'Etre

- Expression of opinions for / against / neutral to a matter as well as to related questions and answers which can be conducted simultaneously, allowing for the information concerned to be transmitted.
- The information required by the local residents can be made available, and, at the same time, controversial points can be directly presented to the central government and TEPCO concerned.
- Local residents and observers can share the same information.
- Committee members who are local residents can share the responsibility and proceed to participation through autonomous operation.

What has come to be known ▯ ▯ ▯ No. 1

- In the public information disclosure / assurance of transparency, it is important not only to make public the cause and result but also to provide information on the process.
- Security / safety is based on the premise of mutual trust.
- Importance of mutual communication.
- The top executives of the central government / TEPCO should know well the current actual condition at the project site including that of local residents and subcontractors.
- A method is necessary to ensure that the information and recognition acquired by the persons in charge at the central government / TEPCO is definitely not forgotten in time (such as at the time of a job transfer).

What has come to be known ▯ ▯ ▯ No. 2

- Local residents should present opinions and proposals, aiming at improvement, taking into consideration the background of the event concerned as well.
- Local residents (citizens) are required to acquire basic knowledge for assessing publicly disclosed information.
- The media should, recognizing their enormous impact, make contrivances and efforts to provide press reports that are reliable for their viewers.

In Conclusion ■ ■ ■

- TEPCO should make an effort to have his discussion on public stage, in the event that there is any problem, recognizing that safe operations within the prescribed framework is most important.
- The central government should seek further transparency in the place of nuclear policy formulation / promotion for the security / safety of citizens, not only to mention the site location.
- The related organizations (local government / central government / TEPCO) should make efforts to present not only the result but also the process of the discussion in response to the opinions of local residents.
- “Chiiki-No-Kai” should make efforts to present statements and proposals with a view to building up better relations, keeping diverse considerations in good balance and discussing them from the viewpoint of local residents.
- To thoroughly learn the ability of mutual communication (including the media).

- **Transparency, urgently required for every field, is indispensable in that of nuclear energy.**
- **It is necessary to classify the information according to its importance and to put it in order in a way that is easy to understand and is under the consensus of all.**

Securing transparency
from the residents' viewpoint

Appendix

BASIC CONCEPT FOR THE ANTICIPATED ESTABLISHMENT OF THE “CHIIKI-NO-KAI, COMMITTEE FOR SECURING SAFE OPERATION OF KASHIWAZAKI-KARIWA NUCLEAR POWER STATION (EXCERPT)”

December 19, 2002

Niigata Prefecture, Kashiwazaki City, Kariwa Village and Nishiyama Town

Purport

In August of this year, the case of data falsification in the recording of the autonomous inspection work by Tokyo Electric Power Company, Incorporated came to light, resulting in serious repercussions for the way the government regulation should be and the system of monitoring the power station by the local government of the area where the station is located, not to mention the remarkable damage suffered by the trust in the power generation operator, which was what local residents relied on among other things for their safety/security.

As a result of such an event, the central government and local government involved as well as the project operator are now studying preventive measures against recurrence.

Since the central government should, above all, be responsible for the safety of nuclear power generation in an integrated fashion, the last resort for trust in nuclear power is nothing but the actual confidence in the central government that regulates and guides the business activities. Although the trust will never be recovered without rebuilding such confidence, the countermeasures announced recently in the interim release are not necessarily satisfactory, making it necessary for the related municipality to request further reinforcement of the nuclear safety regulation system.

While, in the first place, several factors can be cited as a background for such cases to have occurred, it has been strongly pointed out that the closed nature/lack of transparency in relation to the nuclear power in particular impeded prevention in the advance/early detection.

Therefore, it is needed for the area of the site location to conduct supplementary “monitoring” from the viewpoint different from that of the central government, placing emphasis on securing transparency of the power station, for the purpose of preventing recurrence. It is considered necessary to make efforts for strengthening the monitoring system while obtaining advice from experts, and, at the same time, to demand vigorously for “public information disclosure” from the central government and project operator.

CAN TRANSPARENCY BE MEASURED? – A LOOK AHEAD

Mr. Anders Jörle

WGPC Chairman, Head of Information Office, SKI, Sweden

Abstract

The simple answer to this question is no. But if you define the expression and decide what transparency actually is, the answer might be different.

Transparency means different things in different places. In one country transparency means almost total access to anything that a government authority has in its possession.

In another country transparency is more strict access to certain decisions, decisions makers or documents written with the sole purpose of informing the public.

What variables could be found in the word transparent, what is a transparent regulator?

In this short presentation we will deal with some important settings or fundamental prerequisites for a regulator calling itself transparent. Perhaps we should look at them in order of importance. Some days it is difficult to do all at once.

As a final point, if we as regulators wish to call ourselves transparent in a future with diminishing national borders, fast electronic communication and increasing world wide media impact, what does the world require from us as regulators?

You cannot drive forward by looking too much in your backmirror. In that case you might end up having an accident. This is what this is about. And I will also talk about the naked see-through DG.

Secrecy is dying, It's probably already dead! That's what they say. It's a provocative sentence and if true it is demanding on all institutions that have to deal with a wide range of stakeholders and an interested, and sometimes critical social environment.

When moving towards the answer on the question whether transparency can be measured. I think that the starting point should be that secrecy suffers more and more from fatal injuries and probably are more or less buried. But if secrecy is dead, transparency is more prosperous. Let me show you why.

Have a look on Google Earth and the east coast of Finland. The only item that is more detailed shown is this grey part, the Olkiloukto nuclear power site. Who did that selection and why?

Finland is a small country but I choose to look on big US and a place that caught my interest as a aviation fan. And yes the Pensacola air base is as clear as the nuclear power plant in Finland.

When I was a kid people were shot down and killed when taking pictures like these over Cuba and Soviet Union. Now I can get them in my own computer. But if ever transparency could be measured I think we have to define the expression and decide what transparency actually is, otherwise; what will we measure?

As we know from this workshop transparency means different things in different places. In one country transparency means almost total access to anything that a government authority has in its possession. In my own case my e-mail conversations, telephone lists, all internal protocols from meetings, my home address, telephone number, salary, all are accessible to anybody who ask for this information. (the exception is if there might be national security interests involved or if business secrets could be exposed). I can assure you this is a demanding environment. In another country, the right to get an answer to a question is transparency.

So our perception of transparency and a transparent regulator is different in Japan and US, Sweden and France. So when they in US talk about "the naked CEO/DG", the very same person in France probably would at least have a T-shirt on...

In one country media and the public demands an almost immediate communication effort when something has gone wrong in a nuclear installation, in another a couple of days is good enough. If we look at the web page of NEWS at IAEA we can see how different the reporting is. In some cases a month, even years, may pass before a first report is published. Other times not even a week pass before the first initial report is published. The famous questions that should be answered by journalists can be applied also on the issue of regulatory transparency.

Anyone who wishes to communicate has to reflect on some important things:

- Why do I wish to communicate?
- Who is my target?
- What is my message?
- When should I communicate to achieve best result?
- What is the possible impact on my target and others?

But depending on where you come from it is clear that you will all give different advice in your particular country. So there are no worldwide interpretations to be found for the “word” transparent and the question of what is a transparent regulator? Or could we approach this issue with other tools?

When searching for the word transparency on the net it is obviously often related to corruption and bribery. But what has this to do with measuring transparency? And shouldn't I end this presentation here?

If you want to be successful in your activities it is a very good idea to have knowledge of your stakeholders and their attitudes. That can in many cases be measured. Many of us practice that and you have seen examples. So we can measure a lot of things that together might create transparency. But we can probably not measure transparency itself.

This is the old academic approach. But my kids would not go to a big-cost think-tank giving thousands of dollars to get the answers through surveys.

Did you hear the news last week? There was a significant change in the international treatment of the conflict in Darfur. The last country to reject an international action against the ongoing homicide changed attitude. And it was forced to a changing attitude by the pressure from internet campaigns.

If we as regulators and actors on as controversial a scene as the nuclear business want to fight for our reputation and gain confidence there are a lot of things to learn from the opinion work that is ongoing all the time.

If we as regulators wish to call ourselves transparent in a future with diminishing national borders, fast electronic communication and increasing world wide media impact, what does the world require from us as regulators.

Let us have a look at transparency in the new world. Is this transparency?

Have you heard of Fidelity Investment and their stakes in companies with activities in Darfur, Africa? Just two days ago they suddenly changed attitude and decided to leave Darfur. Why? The reason is internet and its possibilities to create opinion. We can again look on Google Earth. Just the area of Darfur is differently exposed and the reason is of course the ongoing Genocide. So Darfur has created an extensive activity based on the internet.

The “Save Darfur” campaign is an interesting example on a world-wide basis, but beware this can also be a national way of dealing with things. I do believe that we are not fully aware of how much another generation is connected and what power there is in the internet if we for some reason get caught with bad performance.

They talk about the see-through CEO or DG. The naked Director General. There are people that say: the most successful organisation is the one that reveals its darkest, deepest secrets online? In a time when company e-mails, governor of California's private conversations, just anything can cross the world on the net. How wise is it to try to hide something illicit, try to hide anything. An unwise gamble!

The rage people feel towards big institutions, government and corporations and also media, is that they feel they are not listened to, no ones there to hear them!

This is the opportunity of today, with internet, with homepages it is possible to change the communication scene, to actually listen and respond. Your success is a matter of how brave you are, how proactive you dare to be.

Online is where reputation is made. Google is not a search engine, it is a reputation-management system and a single google search determines more about how you are perceived than a multi-million dollar survey.

This is a way to measure transparency. And yes transparency can be measured.

CONCLUDING SESSION

General Chair: Dr. Kazuo Sato, NSRA President, Japan

Members:

Dr. Jideki Nariai, JNES President, Japan

Mr. Jacques Repussard, IRSN Director-General, France

Pr. Jukka Laaksonen, Chairman of the CNRA, STUK Director-General, Finland

Mr. Javier Reig, Head of the Nuclear Safety Division, OECD/NEA

CONCLUDING REMARKS

Dr. Hideki Nariai
President, JNES, Japan

I shall begin by speaking about my impressions or my current thoughts concerning nuclear safety.

The transparency of the regulatory bodies was the topic of this workshop. There have been presentations from various countries based on experience and different suggestions.

I believe that we were able to share this information among the participating countries.

Especially in this workshop, it was significant that we had not only representation from the regulatory bodies but also from the press, as well as members from the local areas where the nuclear facilities are sited and I believe there have been opinions expressed from people with various backgrounds.

I do hope that we will be able to continue this kind of discussion from various viewpoints.

When we look at the backdrop of this, there is the society of today which is a society that depends on advanced technology. In other words, it is a society that needs to depend on advanced technology. So in that situation, the roles and responsibilities of technical experts have been increasing all the more. On the other hand, in recent years, globalisation and information society have advanced and therefore information from one country indeed spreads to other countries very quickly.

Now, the importance of the role of nuclear energy is recognised worldwide and for the security of safety of the industry, it is most important to maintain and improve the necessary technical levels. But at the same time, since information goes about the world in an instant, we need to think globally.

By the way, when we talk about stakeholders of the nuclear industry, we basically mean the licensee who conducts the business and also the general public which includes the local residents.

So the role of the regulatory body or the regulation is to, from the perspective of securing safety, make co-ordination or adjustments between the two parties. However, the way this adjustment is made will differ from country to country, depending on the history as well as the culture. And also it is true that in many cases politics play an important role as well.

We are talking about a technically professional area and therefore that makes it all the more difficult to make adjustments or co-ordinate various opinions in order to secure security.

The Japan Nuclear Energy Safety Organization, JNES, is an organization which has the technical expertise in achieving security in the nuclear area.

We are a technical support organisation, a TSO, which is in the position to support NISA, the regulatory body, and we had been established 3 1/2 years ago. So we need to be accountable to the general public from a technical perspective and we need to be transparent.

And to achieve all of this, we have been focusing a lot on PR activities including public hearings and exchange of opinions with local governments and local newspapers.

Through participation in this workshop, I have again acknowledged the improvement of regulatory transparency is one of our important mission to pursue. I hope that the lessons learned and the experience and information gained here can be reflected in our future activities. And I believe that participating countries here feel the same way.

I do hope that you will be able to apply this knowledge and further develop the transparency of regulations in your countries.



Last but not least, I would like to extend our appreciation to OECD/NEA the organiser of this workshop as well as all the people who were related to the preparation of this meeting.

Thank you so very much.

CONCLUDING REMARKS

Prof. Jukka Laaksonen

Chairman of the CNRA, Director-General, STUK, Finland

| | | | |
|--|--|--|---|
|  | Agence pour l'énergie nucléaire Nuclear Energy Agency | WGPC – Tokyo 2007 <i>Transparency of Nuclear Regulatory Activities</i> |  |
| Session 1: Understanding transparency – Key points | | | |
| <ul style="list-style-type: none">• Public Confidence is the outcome of Transparency• Transparency means making regulatory process known to the stakeholders - is not the same as just access to information<ul style="list-style-type: none">• interactions between licensee-inspectors• interactions between inspectors-regulatory management• interactions between regulatory body-political decision makers | | | |
| CNRA/WGPC - 22-23 May 2007 | | WGPC Workshop Tokyo | |

Session 1: **Understanding transparency – Key points**

- Transparency can increase public confidence if regulators' attributes are giving an impression of a solid process:
 - Competence of NRO staff, Openness, Accountability, Internal communication of NRO
- Regulator's transparency must be balanced by Industry Transparency
- Participation of Stakeholders
 - Promotion of Understanding Risk Governance
- Side-effect of Transparency
 - Mis-use of information'?

Session 2: **Stakeholders' expectations – Key points**

- NRO need to be known before a crisis situation as a reliable and independent source of information
 - Regular reporting and public information on topics of public concern
 - Communication with local and regional stakeholders and addressing their concerns with respect to the nuclear facility is essential
 - Explaining in advance and openly plans for new facilities, major modifications (e.g., MOX use) provides an opportunity to gain trust
- If the NRO pretends "no mistake, no uncertainties" public will ask for "zero risk"
 - Public would appreciate humble attitude and readiness to confess uncertainties or accept different views
- Lying, hiding information, falsification results in permanent loss of confidence

Session 2: Stakeholders' expectations – Key points

- Provide the information timely and use understandable language
 - Vacuum will be filled fast by multiple sources of information
 - Ensure immediate access to media (a single event somewhere is affecting public perception everywhere)
 - Prepare proceedings from meetings / hearings without delay
 - Train officials to speak language understand for media/public
- Preference to trust individuals rather than organisations
 - Trustworthy information is the one brought by reliable persons – quality of spokespersons influence the image of the organisation
 - Several spokespersons giving consistent message could increase trustworthiness
- The right to be heard is essential for public
 - Exchange of views helps moderate conflicts

Session 3: Conditions for ensuring transparency – Key points

- Freedom of Information Acts and related Regulations are necessary
 - Public access to be facilitated to documents of interest (NRO, utility)
 - Attitude among regulatory management towards openness is equally important as formal rules on openness
- Useful guidance on stakeholder involvement is available from international organizations (IAEA, NEA) - get familiar with it
- If you improve internal transparency you will also have externally a transparent organisation
 - Survey of NRO staff satisfaction on internal communications used to improve staff training policy – does effect external transparency

Session 3: Conditions for ensuring transparency – Key points

- Educating journalists could give a more comfortable situation
 - Training course and study trips for journalist - create mutual understanding
- Public hearing process structured to improve public participation in NRO decision making process
 - Increased understanding of NRO decision making
 - Possibility of influencing the decisions
 - Enlightening information on different arguments to stakeholders
- Development by NRO of a “branding policy” to be better known

Session 4: Practices for ensuring transparency – Key points

- How much should a regulator communicate? How much the utility?
 - Initiate active communication on issues or events of potential concern before questions are asked by the media or other stakeholders
 - Regulator cannot communicate alone: it is advisable to encourage communication by utilities
 - utility: technical issues
 - NRO: safety significance, assessment of licensee performance, regulatory actions (NRO must know also technical facts and be able to explain them when asked)
 - Public / media have often low confidence in utilities' information
 - this could be improved by openness by utility during normal operation
 - invite media to nuclear site to better understand the real situation

Session 4: Practices for ensuring transparency – Key points

- Best way to avoid loss of confidence is to confess and investigate potential safety concerns in a proactive manner before they lead to increased risk
 - report the start of investigation and its results to media - make report available
 - avoid underestimation of risk in early stage - no firm statements before facts are known and evaluated
- What if public confidence of NRO is lost during an event?
 - experience has shown that it is advisable to invite independent foreign organization or group, or a trustworthy national evaluator, to investigate NRO performance and to report the results in public
 - announcing a self-assessment is useful as well

Session 5: Methods for evaluating transparency – Key points

- Measuring transparency can be done by a variety of means
 - What gets measured and made public gets done and done well
 - Opinion surveys have been helpful as feedback on public confidence and awareness of the regulator
 - But, do public opinion surveys evaluate the transparency of the regulator?
- Would it be better to do self-assessment with criteria proposed by John Loy:
 - stating and describing regulatory process, ensuring access to information, explaining the basis of the decisions, reporting regularly about the safety assessment by the regulator, undertaking active communication programme with the stakeholders

Conclusions

“The more naked - the more trusted”

In order to be trusted by the public and media, provide information of interest before it is even asked, and be prepared to answer any question as thoroughly as you can, not hiding anything and confessing the limitations of your knowledge.

CLOSING REMARKS

Mr. Javier Reig

Head of the Nuclear Safety Division, OECD/NEA

Good afternoon. Before providing the closing remarks on behalf of the NEA, I would like to take this opportunity and make some personal reflections, if you allow me Mr. Chairman.

I have had the opportunity to take part in the three workshops on public communication organised by the NEA. In the first one in Paris in 2000, representing my country, Spain, and in the two last ones in Ottawa in 2004 and Tokyo today, on behalf of the NEA.

The topics for the three workshops follow a logical order, first the focus was on investing in trust in a time when public communication was becoming a big challenge for the regulators. Second, maintaining and measuring public confidence to assess how credible regulators are in front of the public; and finally here in Tokyo, transparency, which is a basic element to achieve trust and credibility.

In my view, a regulatory decision has three main components, it has to be technically sound, legally correct and well communicated. The emphasis in the early years was in the technical matters, till legal issues became a key element to achieve the political acceptance from governments and local authorities. Finally the public communication aspects resulted into a major effort and challenge to achieve social acceptance.

From the discussions in the three workshops I have taken the following thoughts:

- To start the work performed by the regulators has to be excellent from the technical point of view. Technical competence is the basis. Transparency will not help if it is not supported by a solid technical work.
- Internal communication within the regulator is the first step of transparency. Experts and spoke-persons should be interacting continuously, and I strongly support a previous statement in this workshop, that public communication should be a commitment of the full regulatory organisation, not just the spoke-persons and managers. In this sense, WGPC should consider involving more technical experts in their activities.
- Transparency is a two-way learning process. It is not only about providing information, but also about listening and understanding expectations from the public. The differences

between openness and transparency were well addressed at this meeting. Again, WGPC should continue involving more and more stakeholders in their activities.

So, in summary, if I look back to the status on the first workshop, I am convinced we have made significant progress. Regulatory bodies are closer today in their approach to public communication that they were only a few years ago. Even if cultural and social differences have a clear influence on the strategy of each country, I believed we have learned from each other and we should continue this learning process and share the achievements and the difficulties. In this sense, it would be most welcome if the WGPC could put together in a report the findings from the three workshops, as suggested before.

Now let me express thanks on behalf of the NEA to the main actors of this meeting. Let me start by Dr. Kazuo Sato, as General Chairman of the workshop, who has provided the right leadership for the meeting.

Let me thank again the Japanese Government, and more specifically the Ministry for Energy, Trade and Industry (METI), the Nuclear and Industrial Safety Agency (NISA) and the Japanese Nuclear Safety Organization (JNES), for hosting this meeting and all the arrangements they have done to make it a successful event. Mr Satoshi Ito and Mrs Mari Yano have been very efficient in this respect.

I also want to transmit NEA gratitude to the organising committee and its chairman, Mr. Peter Storey, for developing such an interesting programme and continue supporting the meeting very actively during the event.

I have to mention at this point the special contribution made by Mr. Jean Gauvain, the NEA secretariat for WGPC and this meeting.

To finish, I would like to thank all the chairs, speakers and, of course, the participants which have very actively contributed to the success of the workshop.

I sincerely hope that you will take back with you, in addition to the great Japanese hospitality, some new ideas and contacts which will compensate for the time and effort you dedicated to this meeting. Thank you for your attention.

TOKAI-MURA SESSION

MEETING WITH LOCAL REPRESENTATIVES

Chair: Mr. Anders Bredfell, SKI, Sweden

OPENING ADDRESS

Mr. Masami Watanabe
Tokai-Mura Vice Governor

Good afternoon, ladies and gentlemen! Welcome to Tokai-Mura! My name is Masami Watanabe, Vice Governor of Tokai-Mura. We, the Tokai community, would like to extend our sincere and warm welcome to all of you.

Mr. Murakami, our Village Mayor could not be present with us here today due to a pressing official duty. In his behalf, I extend his greetings to all of you.

Tokai-Mura is densely populated. We have about 36 000 people living here. The total area is 37 km². In this small area, there exists a variety of natural ecosystems such as our seashore, rivers and forests, where people enjoy nature in green surroundings and also enjoy the water front.

Since this village was chosen as a site of the Japan Atomic Energy Research Institute (JAERI) in 1956, other nuclear facilities followed JAERI. Now there are a total of 12 nuclear facilities in the vicinity, some of which include a research institute, a fuel fabrication plant, a nuclear power plant and a reprocessing facility. As a historical site of the nuclear energy industry in Japan, Tokai-Mura has experienced its growth, together with the growth of the nuclear energy industry for more than 50 years

Our village history includes two significant nuclear accidents. The first one was a fire and explosion accident in the PNC's asphalt solidification facility which occurred in March 1997. The second one was a criticality accident in the JCO's nuclear fuel fabrication facility which occurred in September 1999. You may have already seen the display describing this accident during your tour at the Ibaraki Science Museum of Atomic Energy. At the time of this accident, 161 local residents were evacuated from the area and about 310 000 people within a 10 km radius were subject to temporary curfew. This accident unfortunately resulted in the death of two employees and the radiation exposure of several hundreds of local residents. In addition to that, the financial damage to the local community was enormous, due to the spread of harmful rumors. For example, local agricultural products were refused by consumers, who believed they were possibly contaminated. The image of Tokai-Mura which we have cherished for a long time was seriously spoiled by this accident.

We sincerely hope that people from all over the world who are involved in the safety regulation of nuclear facilities will take to heart and learn lessons from these accidents, so as not to let them fade away but to use them to further enhance nuclear safety.

Currently, we have a very promising new project in our village. It is the Proton Accelerator Project (called the “J-PARC”) with one of the world’s highest levels of beam strength. This facility is planned to start operation at the end of next year.

Considering this project as a new opportunity for the future prosperity of Tokai-Mura, we are making our best effort to ensure the continued development of our local community as “a Village of Science.” Here the establishment of valuable co-operation between the local community and the nuclear energy industry is achieved by the merging of this highly advanced research activity with the traditional culture. As part of this framework, we are currently discussing possible approaches to support domestic and international researchers who visit our village, including support for the aspects of their everyday life.

In this context, it is an encouraging opportunity and a great honour for us that we can host this conference. We would like to express our sincere appreciation to all parties concerned.

To conclude my introductory comments, I hope that this Tokai-Mura session will bring about great success with significant contributions to the assurance of safety for nuclear facilities around the world, and I also hope that all of you may enjoy a valuable and memorable time in Tokai-Mura.

RISK COMMUNICATION ACTIVITIES TOWARD NUCLEAR SAFETY IN TOKAI: “YOUR SAFETY IS OUR SAFETY”

Ms. Tomoko Tsuchiya

CRIEPI, member of HSE Risk C-Cube (NPO), Japan

Abstract

As several decades have passed since the construction of nuclear power plants began, residents have become gradually less interested in nuclear safety. The Tokai criticality accident in 1999, however, had roused residents in Tokai-Mura to realize that they live with nuclear technology risks. To prepare a field of risk communication, the Tokai-Mura C³ project began as a pilot research project supported by NISA. After the project ended, we are continuing risk communication activities as a non-profit organisation.

The most important activity of C³ project is the citizen's inspection programme for nuclear related facilities. This programme was decided by participants who voluntarily applied to the project. The concept of the citizen's inspection programme is “not the usual facility tours.” Participants are involved from the planning stage and continue to communicate with workers of the inspected nuclear facility.

Since 2003, we have conducted six programmes for five nuclear related organisations. Participants evaluated that radiation protection measures were near good but there were some problems concerning the worker's safety and safety culture, and proposed a mixture of advice based on personal experience. Some advice was accepted and it did improve the facility's safety measures. Other suggestions were not agreed upon by nuclear organisations. The reason lies in the difference of concept between the nuclear expert's “safety” and the citizen's “safety”. Residents do not worry about radiation only, but also about the facility's safety as a whole including the worker's safety. They say, “If the workers are not safe, you also are unable to protect us.”

Although the disagreement remained, the participants and the nuclear industry learned much about each other. Participating citizens received a substantial amount of knowledge about the nuclear industry and its safety measures, and feel the credibility and openness of the nuclear industry. On the other hand, the nuclear experts were able to understand residents' primary concerns and they noticed that some of their advice proved to be useful. We strongly want to continue our activities so as to make such partnerships between the public and the nuclear industry for our own safety.

About us

- What is C³
 - Communication and Collaboration with the Community
- Background
 - Tokai Criticality Accident in 1999
- Beginning
 - Pilot program of risk communication (grant from NISA/JNES) from FY 2002 to FY 2004

Site tours by the local residents to inspect safety measures implemented in nuclear facilities

Citizen's
Inspection Visit
Program



- Discuss activities that are important to residents in Tokai village
- Residents themselves implement measures that are strongly demanded but not realized

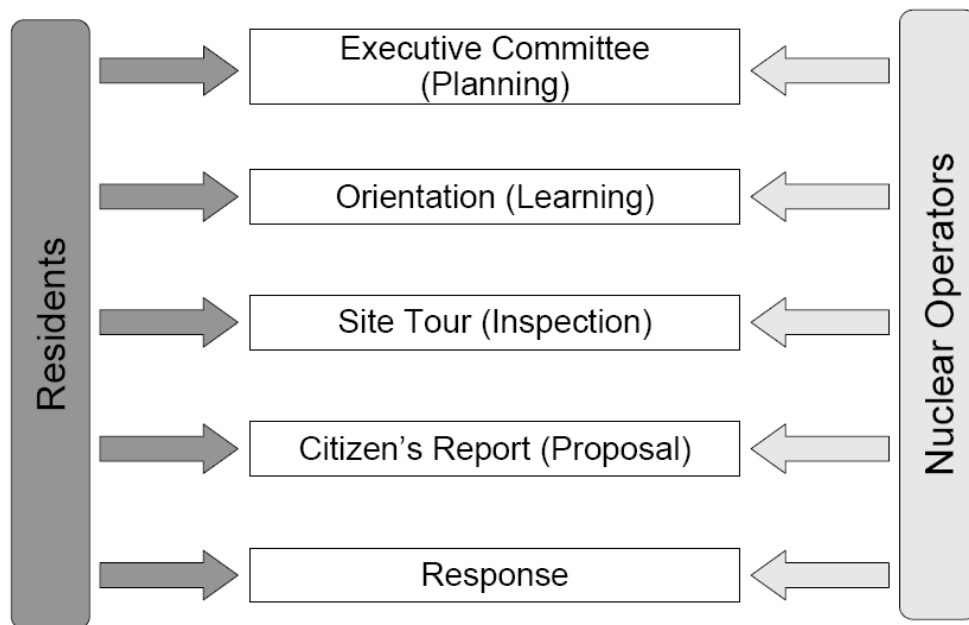
Features of the CIV Program

- "Not the same as an ordinary site tour!"



Citizens participate from the very beginning and interactive discussions are often held.

Features of CIV program (Process)



Executive Committee (Planning)



After an explanation on the business activities as a whole is given, facilities subject to inspection and details of the inspection are determined.

Areas that are not included in an ordinary tour are also covered in the inspection.

Site Tour (Inspection)



We have visited 3 facilities at 2 sites in 2 years.

We also participated in emergency drilling and gave advice to Tokai Village.

Submission of the Citizen's Report



Assess favorable and unfavorable aspects and suggest areas for improvement.

Response to the Citizen's Report



Receive the feedback from the operators about our assessment and suggestions.

Views from Nuclear Sites



Enough time is apportioned for our opinions to be heard;
Constructive communication is possible; Things that were taken for granted are viewed in a new perspective;
Evaluation by third parties is important;

Operators' approaches to safety management are not understood completely.

Differences between "Safety" Management by Operators and Views of Residents on "Safety"

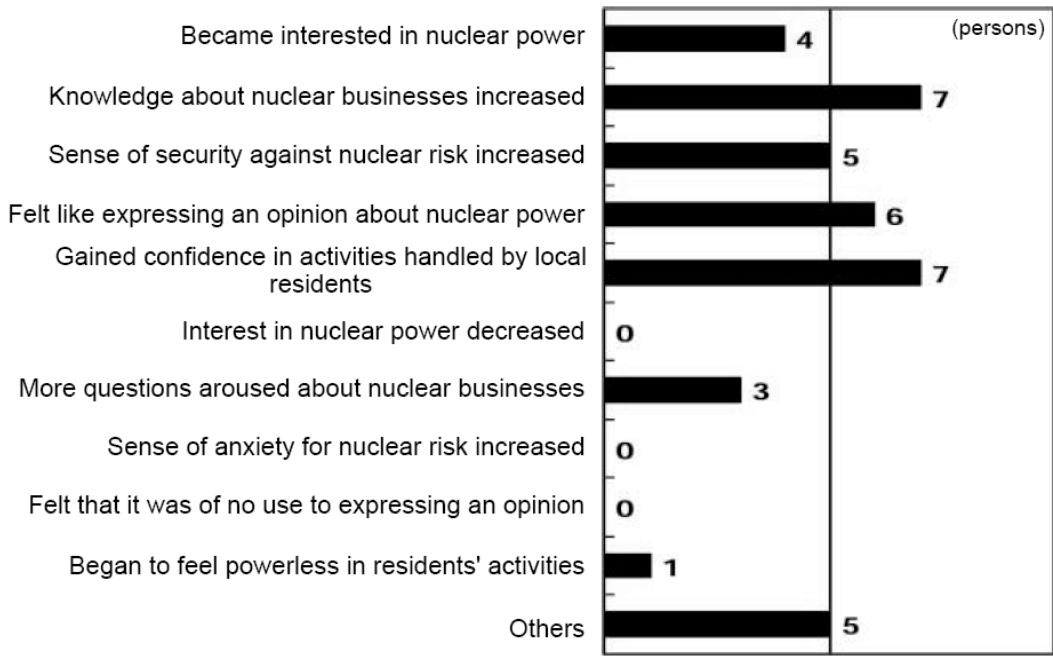
Operators

- There are different maintenance criteria depending on the facility.
- Personnel have received enough training and are well experienced in their own jobs. (Indications on equipment is not necessary for proper operation.)
- Safety measures are taken to comply with laws and regulations.

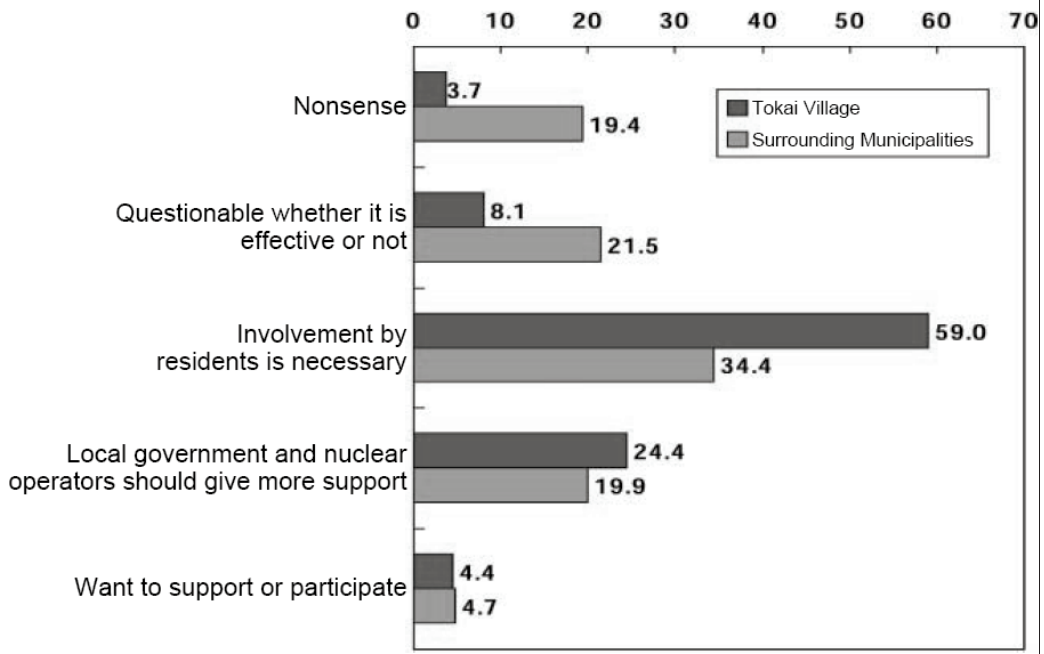
Residents

- Do the walls of organization cause differences in the work safety level among the facilities? Focus may be only on radiation safety.
- Are they prepared for operation in an emergency or by an inexperienced worker?
- Did they develop safety measures by themselves not just following the specified rules? They should do more than what is ordered by the national government, if necessary.

Changes in Viewpoint of Members of the "Resident Initiative" Group (11 out of the 12 members who answered "changed.")



Opinions Regarding Involvement of Residents in Environmental or Nuclear Safety Issues (from FY 2004 Questionnaire to the Residents)



Dialog Meeting with Nuclear Safety Inspectors offices was held



Roles and activities of NISA and limits of inspection were recognized.

Future Challenges



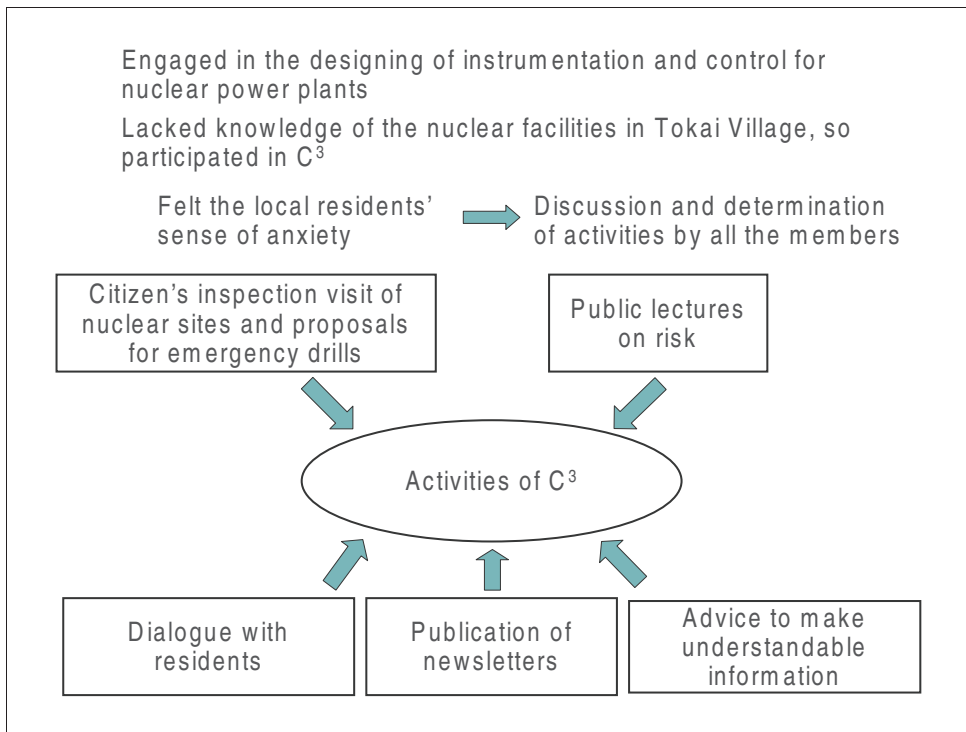
- To continue the CIV program
- To gather the local residents' comments
- To provide opportunities to learn about the risk involved

MESSAGE FROM PARTICIPANT

Mr. Takao Sato

*Representative of Tokai-Mura Branch
Member of HSE Risk C-Cube (NPO), Japan*

I introduce my background and all the activities of Tokai-C³, how we decided on the activities and what our results prove to be. Then, I indicate our problems and how to solve them.



Activities So Far

Citizen's inspection visits: 5 sites
Proposals of nuclear emergency drills: 4 times
Public lectures on risk: 4 times
Dialogue with residents: 2 times
Publication of newsletters: 5 times
Advice on a brochure : once

Future Challenges

To establish a financial foundation
To increase the membership
To review countermeasures for preventing a recurrence of troubles after the citizen's inspection program
To enhance recognition of our existence in every level of licensees and local government

MESSAGE FROM PARTICIPANT

Ms. Tomoko Shimizu

Leader of Public Relation Group, Tokai-Mura Branch

Member of HSE Risk C-Cube (NPO), Japan

I gradually feel less anxious about nuclear power technology by the continuous execution of the citizen's inspection programme, looking at the inside of nuclear facilities and checking their safety management. I think that our proposals are useful for the nuclear related organisation since these proposals are realistic and based on knowledge and experience from our members who have worked in a variety of different jobs.

Atomic Power Tea Time

- NPO C³ has been involved in activities to visit nuclear facilities in Tokai Village. As a part of our contribution to the local community, we have set up a communication opportunity with local residence called "Atomic Power Tea Time". While it is still a new event, we organized this event twice (in 2005 and 2006) so far. The discussion with the local people was held in a casual atmosphere centered on their concerns about nuclear power-related issues. We also gave presentation to introduce the facts about the nuclear sites we visited using an overhead projector. In future, we would like to communicate request and concerns suggested by local residence to the people working in the nuclear site taking the opportunity of site visit.



We take part in a yearly big event “Tokai Festival” by organizing a poster exhibition and conducting a survey based on questionnaire for event visitors. While I joined this NPO just 2 years ago, I am eager to achieve fruitful contribution to our society under the motto of “Persistence leads to success”.

MESSAGE FROM PARTICIPANT

Mr. Yutaka Komiyama

*Leader of Citizen's Inspection Group, Tokai-Mura Branch
Member of HSE Risk C-Cube (NPO), Japan*

I was aware that my knowledge about nuclear technology was quite small when the criticality accident happened. I have begun to learn about nuclear power technology and its safety by gathering articles of news related to the accident, going to lectures about nuclear power technology, and so on. Then, I participated in the C³ project. Getting the chance to visit some nuclear facilities and to communicate other participants, I now think that we residents have a responsibility to learn about nuclear power technology and be alert to its safety, not leaving everything only in the government's hand.

Motives for Participating in the Tokai C³ Project



1. Lack of knowledge for appropriate actions that should have been taken when the JCO accident occurred, there was only the feeling of fear.
2. Absence of the concept of what a nuclear criticality accident meant, although having lived in Tokai Village for 30 years.
3. No notion of where the nuclear facilities in Tokai Village were located and what they did or for what purposes.
4. Participated in disaster prevention activities in a positive manner after obtaining knowledge about the points 2 and 3 mentioned above.

Impressions of Citizen's Inspection Visits (1)



1. We have visited five nuclear sites so far.
2. Each site maintains a high level of nuclear safety, especially radiation protection.
3. They especially comply with the safety measures mandated law.
4. We found that implemented work safety measures were unsatisfactory in some cases.
5. 5S principles (SEIRI - tidiness, SEITON - orderliness, SEISO - cleanup, SEIKETSU - cleanliness and SHITSUKE - discipline) are fundamentals of accident prevention. In general, Standards and Cleanliness were thoroughly observed, while Tidiness and Orderliness were sometimes insufficient.
6. In some cases, safety measures were taken but without a fool-proof system. Wisdom should be utilized more based on the truth that everyone makes mistakes.
7. Most nuclear safety measures are based on the view that human nature is fundamentally good. Every time I hear news of terrorist attacks in Iraq, however, I feel that it may also be necessary to have safety measures based on the view that human nature is fundamentally evil.

Impressions of Citizen's Inspection Visits (2)



8. Most members of Tokai C³ have worked for companies before. Their experience accumulated during their career significantly contributes to the identification of problems during site visits.
9. In some cases, problems had been identified during such site visits, but failure to take adequate measures led to an accident.
10. Many people say that research facilities generally do not implement enough safety measures. However, the research facility we have visited was vigorously engaged in activities to ensure safety, contrary to such a common belief.

NUCLEAR REGULATOR PRACTICES FOR COMMUNICATING WITH THE PUBLIC

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Abstract

For decades, the U.S. Nuclear Regulatory Commission has communicated with members of the public so that they are aware of what the NRC does to protect them from the hazards of unnecessary radiation from nuclear power plants and other uses of radioactive material. Because the agency views nuclear regulation as the public's business, it should be transacted openly and candidly in order to maintain the public's confidence. The NRC recognizes that the public must be informed about, and have a reasonable opportunity to participate meaningfully in, the Agency's regulatory processes.

The agency uses a variety of means to ensure openness in its regulatory process and thereby increasing public confidence. With rapidly expanding electronic capability, the agency has looked to new ways to reach out to the American public to let them know we are on the job overseeing nuclear safety. While we continue to communicate in some of the traditional ways – news releases, news conferences, briefings, speeches, Internet, brochures, and meetings – we are also exploring using blogs, mobile cell phone notifications, focus groups, open houses, and e-mail alerts to name a few.

Transparency implies openness, communication and accountability to help preclude secrecy, corruption and distrust. Perfect transparency would make all information open and freely available. While the United States Nuclear Regulatory Commission (NRC) may not have perfect transparency, it does have a strategic plan with a goal to ensure openness in our regulatory process. We view nuclear regulation as the public's business and it has a right to know what the agency is doing to protect them from unnecessary radiation in the use of nuclear materials for beneficial purposes and the generation of nuclear power. Furthermore, openness is essential for ensuring the agency remains a strong, fair and credible regulator.

Our strategies for achieving openness are:

- Provide accurate and timely information to the public about the uses of and risks associated with radioactive materials and about the safety performance of the licensees regulated by the NRC.
- Provide a fair and timely process to allow public involvement in NRC decision-making matters not involving sensitive, classified, safeguards, or proprietary information. Provide the same involving non-public matters for appropriately-cleared stakeholders
- Obtain early public involvement on issues most likely to generate substantial interest and promote two-way communication to enhance public confidence in the NRC and its regulatory processes.
- Enhance the awareness of the NRC's independent role in protecting public health and safety and the environment.

Good communication is a key ingredient to achieving openness and is a top priority at our agency from the highest levels of management. The agency is committed to keeping members of the public informed so that they can participate effectively in NRC decision making. We strive to clearly communicate and explain the NRC's role, its decisions, the decision-making process and actions, and technical issues of concern or interest to the public. It should be clear how the NRC "protects people and the environment" – our recently developed tagline for our new logo.

As part of the U.S. Federal Government, NRC must abide by the provision of the Freedom of Information Act (FOIA) that recognizes and protects citizens' right to access information in public organisations. This right to demand information is fundamental to building trust among members of the public and fights against potential corruption. NRC supports FOIA and works to make the vast majority of its documents public, in the Public Document Room in our headquarters complex in Rockville, Maryland, or through the Internet, so that we may have fewer FOIA requests to process.

In addition to FOIA, the NRC is required by law to make certain regulatory information available to the public. The agency has historically made a large volume of documents available to the public every day through our Web site. However, since the terrorist attacks September 11, 2001, we had to take down our Web site and remove any information or documents that could assist potential terrorists. We have had to rethink whether the information should continue to be made available to the public – particularly all those documents that were not required to be made public and could be useful to terrorists. So we are continually challenged to balance national security needs with the need to be an open agency as many of you must do, too.

Recently we had a challenging situation where the agency had adopted a policy of not revealing information about a particular nuclear fuel facility, that makes nuclear fuel for naval reactors, due to security concerns. When a potential criticality incident occurred there last year, we did not make public the operators report on the incident as we normally do for other non-sensitive facilities. We did report to IAEA a spill of nine gallons of highly enriched uranium solution as a Category 2 incident on the International Nuclear Event Scale which, as you know, is publicly available on the Internet. However, the name and location of the facility was withheld from that report. Earlier this month, we provided to the U.S. Congress our annual public report on 2006 Abnormal Occurrences and included a description of this incident. However, as required by law, this time we identified the name and location of the facility in this report. This led to an outcry in the media that we had kept this information hidden for over a year.

One local newspaper reported that “residents who live near the facility have good reason to wonder if their health and well-being, not to mention the safety of the employees at the plant, were placed in jeopardy on the day the incident occurred. It’s disturbing that NRC has kept the details of the accident a secret from the plant’s neighbours.” We explained that this was a sensitive facility and there was no threat to public health and safety. However, this experience has led NRC to review how it implements its public information policy with regard to communications on these types of “sensitive facilities”.

During the last workshop of the Working Group on Public Communications in Ottawa, I described the various ways the NRC communicates with the media and the general public. I would like to update that information.

Media relations

Press releases explaining Commission policy decisions and actions and announcing major events provide the main means of keeping the media informed about the NRC. Releases are provided through an automatic e-mail notification system called a “listserve” and to the entire world by posting releases on our website at <http://www.nrc.gov>.

We are now trying to incorporate visual items into our releases such as photos, diagrams, and other graphics where appropriate to help communicate the information more clearly to the general public. For example, for a press release about a lost nuclear gauge, we include a photo for easier recognition by the public and thus a greater chance of identifying and retrieving the gauge. We haven’t advanced to the point of augmenting written releases with broadcast clips. We may, however, consider this in the not-too-distant future. Of course we still strive to improve explanations of technical issues using plain language and are exploring providing certain key press releases in Spanish.

In addition to press releases, we craft letters to the editor and op-ed pieces to try to get our messages out early and correct errors in news stories. We also have a place on our Web site called “For the Record” where we post our position on numerous issues or correct misconstrued information in the media.

NRC conducts hundreds of media interviews by telephone or in person with TV, radio, print, and internet reporters in which we provide information for the media to understand technical and complex issues. We conduct media interviews by telephone daily for routine items, but should there be a high-profile issue, emergency, event, or breaking news involving a nuclear facility, as most of you know, the calls and interviews increase dramatically and we may decide on other means to communicate with the media such as a press conference. We also meet in advance of

some public meetings close to nuclear power plants with nearby editorial boards to go over basic information or help educate reporters about a current issue at a licensed facility. Our goal is to get our key points and messages understood and reported accurately so that the public gets the facts up front.

This fall we will offer a workshop once again to new reporters who cover the NRC and the nuclear beat to give them a more detailed understanding of the NRC, its regulatory process, how nuclear power plants work and radiation safety basics. We will discuss the regulatory implications of the nuclear renaissance, assuring a highly-trained, knowledgeable workforce, and securing radioactive sources to keep them out of the hands of terrorists who may be interested in making dirty bombs. We typically conduct this training one each year at our Technical Training Center in Chattanooga, Tennessee, where there are plant models and reactor control room simulator. A tour of a nearby nuclear plant is also offered.

Internet

The Internet, as you all know, has revolutionized communications and brought an abundance of information to people all over the world at the touch of a button at almost any place and any time. It is one of the most powerful communication tools for all of us. The NRC's Web site contains an enormous amount of information and non-classified documents and is kept up-to-date. For those nuclear issues or plants with high public interest, we have developed web pages specifically for them. It also has a special corner for teachers and students with information and study guides on basic radiation safety.

The NRC posts all speeches and most documentation of Commission decisions as well as Congressional correspondence to our website daily so that the public can see how we conduct business and understand the rationale behind our decisions and actions. We also post plant status reports each day and make reports on events at licensed facilities and users of nuclear material available to the public on our website. All non-security inspections and nuclear plant assessments by NRC are posted to the web to keep the public informed about the status of safety operations at licensed facilities. And we answer thousands of electronic mail inquiries from the web which has already far surpassed the number of letters we receive through the post office.

All the NRC's pamphlets, brochures and fact sheets that are written for the general public are available on its Web site. Moving into the electronic and visual age, the NRC has added photos to its website to "put a face" on the agency and make it more appealing to the public. We may add video clips some time in the near future. Web streaming via the Internet is used to open all Commission public meetings for anyone to watch across the globe through use of a computer at home or elsewhere. Both live and archived meetings are available and the latter can be viewed at any time desired. We are also developing a photo gallery and possibly video footage for reporters to download and use in their stories in newspapers, on TV and online at "dot com" media outlets. Podcasts may be considered in the future for some public meetings, particularly those of high public interest, so that reporters can view them when convenient using their IPODS. We may also consider the use of blogs – a potential tool for more transparency – after we evaluate their usefulness.

Outreach – briefings and discussions

We have increased our public outreach by a number of mechanisms – more speeches, briefings, news conferences, and meetings with editorial boards, district congressional offices and the public to explain what the NRC does and how it regulates the safety of the nuclear industry.

For example, before reviewing an application for a nuclear plant to extend its operating license past the initial 40-year license, the NRC holds a public meeting near the plant to describe the license renewal process. This helps members of the public understand how we carry out our review and where in the process they may participate. It also helps us identify those areas needing additional explanation. We plan to hold a public meeting in advance of receiving each new reactor application in the vicinity of the proposed plant site to explain the licensing process and identify where in the process there will be opportunities for the public to participate. The first one of these meetings will take place next month in south Texas.

Clear information early in the process and opportunities for public participation help assuage some concerns by members of nearby communities and demystifies the regulatory process, thus contributing to transparency and helping to build public confidence in the NRC and manage the public's expectations.

We provide regular briefings to members of Congress who oversee the agency on the latest issues. Recently we've briefed on how we're preparing to handle as many as 19 new plant license applications, for upwards of 28 reactors, that are expected to start arriving at NRC this fall. A concomitant issue we have discussed on Capitol Hill is getting sufficient office space for the new staff that is being hired to process these new applications.

For particularly news-worthy events, news conferences are conducted to effectively communicate special announcements by top NRC officials, typically the Chairman, to a large group of reporters in one setting. We used this technique effectively to convey to the national media what the NRC did to strengthen nuclear security after the 11 September 2001 terrorist attacks.

Public meetings, workshops, and open houses

Each year, the NRC conducts hundreds of public meetings, including one held at or near each of the 104 nuclear power plants at 65 sites around the country to provide our assessment of each plant's safety performance. This meeting provides nearby residents an opportunity to ask the NRC questions about how the agency assesses plant performance and provides safety oversight for the all reactors. For questions on plant security at these meetings, much of the information is classified, however, we attempt to give the public and the media as much information as we can to ease their concerns without compromising national security. If there is high public interest in a plant, we will tailor a public information strategy to meet the needs specific to the situation. When the Davis Besse nuclear power plant in Ohio shut down in 2002 to replace its reactor head that unexpectedly developed a pineapple-sized cavity, the agency held over 50 public meetings and dozens of Congressional briefings within a two-year period on that plant alone. We also issued frequent newsletters to keep nearby residents current on NRC's activities and the plant's corrective actions.

We've employed a series of workshops on various occasions to: obtain public comments on regulatory proposals, to further explain rule changes and how they affect our licensees or to discuss new programmes when they are put in place. Workshops may include presentations and exhibits or displays and usually end with interactive working groups. Workshops have helped to maximize feedback from participants and foster ownership in solving problems. Increased use of exhibits and displays have helped us explain issues and interrelationships. Truly a picture is worth 1 000 words!

Open houses or “town hall” meetings have been held successfully either by themselves or immediately before formal public meetings usually in the vicinity of a nuclear plant or other licensed facility. This allows the public to meet our staff, gather information and engage in discussions in a relaxed, informal environment. The open house forum is good for fostering small group or one-on-one communications and helps build credibility. We’ve used workshops successfully in Nevada to explain high-level radioactive waste issues and related NRC activities in advance of our review of the Department of Energy’s application to build and operate a disposal facility at Yucca Mountain. We’ve also used an open house format for discussions on the performance of the Indian Point nuclear power plant about 25 miles north of New York City where activists contribute to a highly charged environment.

Videos

The NRC is exploring expanded use of video technology on its web and in its outreach efforts. Although the NRC has used videos in the past to tell its story, we are in the process of producing two new videos about the NRC and the licensing process for new nuclear power plant applications. These videos have a variety of uses on the web, as DVD handouts or video clips at recruitment fairs, and at annual plant assessment meetings. They could also be useful for basic orientation of new NRC employees.

The agency continues to look for new and effective ways to improve its communications with the public, the media and our other constituents. Presenting technical, complex and often legal information in an uncomplicated, relevant and timely manner is key to public understanding and the transparency equation. Each year Federal government agencies produce performance reports for the public that are scored on a number of attributes including “transparency.” The NRC has consistently scored in the middle of the pack, so we have our work cut out for us to get to the head of the line.

We at the NRC are committed to sharing openly, to the extent possible, our information and decision-making processes with the public, consistent with the law and to facilitate public involvement. Listening is also vital to communicating with the public and understanding their concerns. It is critically important for the regulator’s messages to be clear and their lines of communication open for the public to have confidence in regulators looking out for the public’s best interest.

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Transparency of Nuclear Regulatory Activities

One of the main missions of nuclear regulators is to protect the public, and this cannot be completely achieved without public confidence. The more a regulatory process is transparent, the more such confidence will grow. Despite important cultural differences across countries, a number of common features characterise media and public expectations regarding any activity with an associated risk.

A common understanding of transparency and main stakeholders' expectations in the field of nuclear safety were identified during this workshop, together with a number of conditions and practices aimed at improving the transparency of nuclear regulatory activities. These conditions and practices are described herein, and will be of particular interest to all those working in the nuclear regulatory field. Their implementation may, however, differ from one country to another depending on national context.

