Transactions of the Korean Nuclear Society Autumn Meeting
PyeongChang, Korea, October 25-26, 2007

Transparency in Nuclear Regulation: Trends and Future Prospects

Kwang Sik Choi, Young Sung Choi, Seong Ho Kim
Korea Institute of Nuclear Safety

1. Introduction

Recently, improving transparency (or openness) has been one of important issues related to nuclear safety worldwide. As for the transparency in nuclear regulatory activities in Korea, openness has been declared as one of five principles of the nuclear regulation in the 'nuclear safety policy statement' announced in 1994. Transparency has been discussed and emphasized in various international meetings such as the Convention on Nuclear Safety, OECD/NEA meetings, etc. For example, Working Group on Public Communication of nuclear regulatory organizations (WGPC) of the OECD/NEA/CNRA held a workshop on "the transparency of nuclear regulatory activities" in May 2007 in Tokyo, Japan.

In this paper, definition of transparency and its international trends ranging from a general administration to nuclear safety activities are discussed based on the results of meetings and workshops held so far. Measures for improvement associated with transparency are also proposed.

2. Trends of Transparency

Besides engineering safety, various concepts and terms developed in social science have been introduced to nuclear fields to address socio-psychological aspects of nuclear safety. They are reliability, independence, openness, transparency, trust, confidence, effectiveness, rationality, communication and so on. As for the transparency, definition is reviewed as a general term and also discussed from a nuclear regulation viewpoint.

2.1 Definition of Transparency

The quality that an object or substance has when you can see through it is called transparency. The transparency of a process, situation, or statement is its quality of being easily understood or recognized, for example, because there are no secrets connected with it, or because it is expressed in a clear way. Transparency is also related to honesty. Being transparent is not to hide or to deceive. Therefore, the axiom "Honesty is the best policy." might be converted to "Transparency is the best policy." [3]

2.2 International Trends of Transparency

Recently, transparency is increasingly pursued as public education level and public awareness increased. Stakeholders' increasing demand and NGOs activities also enhanced the needs for using this term. In particular, the transparency is associated with anti-corruption in a governmental administration process,

Advanced information and communications technology and evolution of digital techniques enabled two phenomena to emerge: 1) An electronic approval process system is introduced in the business and public sectors; 2) An electronic government appears. They enable us to construct an infrastructure for ensuring transparency.

Since a document archive system has changed from hard copy to electronic document, the public come to easily access to data or documents without complicated request process. Public might demand the access to the electronic documents of a government or regulatory body.

On the regulatory transparency, a first workshop "Investing in trust- nuclear regulators and the public" was held in 2000 in Paris [1]. The main outcomes of the workshop can be summarized as follows: 1) public communication should be considered a key function; 2) good communications is information transfer in/out a nuclear regulatory organization (NRO); 3) information must be easily available to the public. The WGPC workshop 2004 was held on "Building, measuring, and improving public confidence in the nuclear regulator" in Canada [2]. It was agreed that public/regulator communication, information openness, transparency, and public confidence in regulator have interdependence as well as effects on each other. The WGPC workshop 2007 was held in Tokyo. Understanding of the transparency, expectations of stakeholders, conditions for ensuring transparency and measuring transparency were discussed in this workshop. It was understood that competence, openness, internal communication are essential to public confidence. Transparency of regulator and licensee need to be balanced and might be understood in terms of risk governance as stakeholders' interaction is increasingly involved.

3. Transparency of Regulatory Activities

3.1 Characteristics of Regulatory Transparency

As for safety activities associated with nuclear facilities, the transparency or openness should be understood as one element of public confidence in regulator and also licensees. Public confidence is essential for obtaining public easiness or satisfaction with nuclear safety, as indicated in the model(Choi's model) shown in Fig.1. It is pursued to resolve the problems related to information asymmetry between regulator and the public. It may cause 'principal agency

problems' and also may lead to the moral hazard of regulators. With less transparency, regulator is likely to behave so as to favor himself or licensee against public interest. It also may cause regulatory capture and regulatory failure in the end. Within regulatory body, lack of transparency may cause whistle blowing. Transparency to global society is also required. Submission of national reports to secretariat of Nuclear Safety Convention for peer review is the transparency related obligation. There is trend to ensuring transparency in government administration. The framework for transparency in regulatory decision process is constructed. The website of regulatory body has significantly contributed to ensure regulatory transparency and answers to questions or response to data request has been increasingly conducted via internet or e-mailing.

3.2 Adverse Effects of Transparency

Transparency indicates that information is opened and provided as it is. In this case, however, the public cannot understand the information or can be mislead. Adverse feeling, uneasiness, can be caused if the ambiguous information provided is interpreted with political motivation and propagated to the public. Transparency may also conflict with confidentiality, which requires careful approach. The adverse effect enabled pre-censorship in that regard. Presently, comparing the cost-benefit of transparency/openness from a long-term viewpoint reveals that the benefit of transparency/openness is greater than cost. The adverse effect of transparency is, however, often for the viewpoint of the person in charge, rather than for the public.

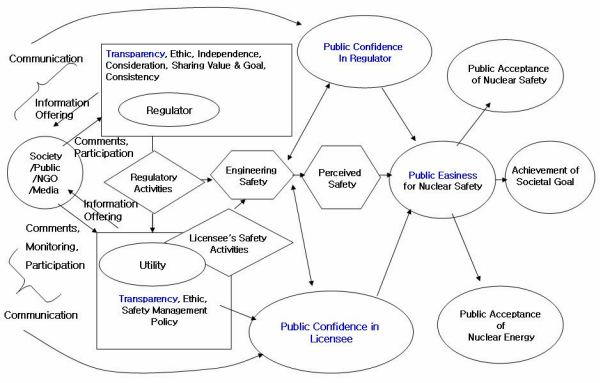

Figure 1. Transparency, confidence and easiness model

3.3 Measures for More Transparency in Regulation

Regulator and major decision-makers have to understand the features, background and political implications of the transparency. As regulatory activities are increasingly likely to be opened when stakeholders want, regulators have to work always in a transparent manner accordingly. It is also important for regulators to make a prompt and honest response at the early stage when any critical incident occurs. To enhance regulatory transparency, technical terms need to be rephrased in more plain terms. Resources for that should be provided. A website for information access must be operated in English for international transparency, where diversity of information is actively posted and updated as appropriate. Sufficient provision of budget for these activities must be also considered.

3.4 Prospects of Nuclear Regulatory Transparency

Regulatory body is working for meeting the public interests and for ensuring the public easiness. Information should be offered to the public and the transparency of the regulatory process may be provided. The public will demand the access right to document system of regulator and it will ask every conference open on Internet in the future. As noted in the Fig.1, public easiness will also depends on the public confidence in licensee and it is related to the licensee's transparency. Regulator's interaction on licensee's transparency might be needed because obtaining public easiness by pursuing regulatory transparency has limitations. Regulators might face with the public demands for infinite transparency, which would be the most serious challenge. Information disclosure might be, however, regarded as an alternative measure for reducing regulatory resources.

2. Conclusion

Transparency is essential for obtaining public confidence and public easiness in nuclear safety in the end. As demands for transparency will be increased, measures should be carefully considered and properly prepared. Regulatory intervention in the licensee's transparency/confidence matters shall be carefully reviewed, as the transparency of licensee plays an important role in the satisfaction of the public easiness.

REFERENCES

[1] NEA/OECD, The Transparency of Nuclear Regulatory Activities, in http://www.nea.fr/html/nsd/workshops/transparency/, 2007.
[2] NEA/OECD, Building, measuring, and improving public confidence in the nuclear regulator, workshop proceedings, Ottawa, Canada, 18-20 May 2004.