Preparatory Committee for the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

NPT/CONF.2010/PC.II/WP.8 25 April 2008

Original: ENGLISH

Second session Geneva, 28 April-9 May 2008

CLUSTER 3: PEACEFUL USES OF NUCLEAR ENERGY AND JAPAN'S EXPERIENCE

Working paper submitted by Japan

Rising expectations for nuclear power

- 1. Nuclear energy has made an invaluable contribution to mankind in various areas including human health and medicine, food and agriculture and industry. A large number of countries strongly support the development of peaceful uses for nuclear energy.
- 2. Recent international environment demands new focus in the uses of nuclear energy. Over the last few years, a growing number of countries worldwide according to some calculations, around 30 countries have expressed their interest in embarking on nuclear power programs. The promotion of applications of nuclear power is considered crucial to meeting the challenge of providing sufficient and reliable energy to support the world's sustainable development for the benefit of all. This renewed interest in the potential of nuclear power is shown by the resolution on nuclear power applications adopted at the fifty-first General Conference of the International Atomic Energy Agency (IAEA).

GE.08-60936

- 3. Those countries that have or are considering plans for nuclear energy believe that nuclear power will make an essential input to their sustainable development strategies and contribute to global energy security while reducing air pollution and addressing climate change, while others hold different views based upon their assessment of benefits and risks. While the outlook for global average energy consumption rate remains mixed, there is clearly a sense of rising expectations for nuclear power.
- 4. These new circumstances have high relevance to the implementation of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Article IV of the NPT establishes the "inalienable right" of all States Parties to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I, II and III of the Treaty. Applications of nuclear power are an important part of peaceful uses foreseen in article IV of the NPT.

Infrastructure necessary for the development of nuclear power program

- 5. Due to its dual nature, certain nuclear technology can be misused for non-peaceful purposes. Furthermore, should nuclear accidents occur, they would cause a serious consequence not only to the country where the nuclear power plant in question locates, but also to the neighboring countries and to the international community as a whole. Since 11 September 2001, the international community has renewed its awareness of the real and imminent threat of terrorism involving nuclear weapons and material.
- 6. While each state has a right to define its national energy policy, the use of nuclear power must be accompanied by commitments to effective implementation of nuclear non-proliferation/Safeguards, Safety and Security (3Ss) in accordance with its national requirement and its relevant international obligations including those under the NPT. It is even more important for the international community to reconfirm common understanding

that ensuring 3Ss constitutes an indispensable part of the necessary infrastructure for the introduction of nuclear power generation. While ensuring 3Ss is primarily the responsibility of the countries interested in nuclear power programs, international cooperation in this field is beneficial to support the countries concerned.

"3Ss" and Japan's experience

- 7. In this connection, Japan's experience in the peaceful uses of nuclear power can provide an example for countries interested in the peaceful uses of nuclear energy ensuring 3Ss.
- 8. Japan adheres to the "Three Non-Nuclear Principles," of not possessing nuclear weapons, not producing, and not permitting the introduction of nuclear weapons into Japan. "The Atomic Energy Basic Law" also limits the use of nuclear energy only to peaceful purposes. In addition to these political and legal commitments, Japan applies stringent and concrete 3Ss measures to its nuclear activities in a manner consistent with the highest international standard. Japan utilizes nuclear energy for peaceful purposes, fully ensuring international confidence and maintaining high transparency through faithful implementation of its IAEA safeguards agreement, the Additional Protocol and integrated safeguards. It is under these strict national policy and regulations that Japan has started to utilize recovered materials such as plutonium and uranium from reprocessed spent nuclear fuel. Japan continues to uphold its established policy on the peaceful uses of nuclear energy through the strict application of safeguards.

International cooperation for the development of nuclear power program

9. While it is a matter of principle that those countries considering nuclear power programs have to bear the responsibilities in developing 3Ss and other necessary infrastructures before they embark upon nuclear power programs, international cooperation both bilateral and multilateral in this field is an essential part of the development of peaceful uses of nuclear energy. Many countries have actively been engaged in international cooperation

through a large number of cooperation arrangements with a view to ensuring 3Ss. The IAEA has substantive ongoing activities for 3Ss and other necessary infrastructures, such as publication of IAEA Nuclear Energy Series: "Milestones in the Development of a National Nuclear Power Infrastructure." The IAEA has also undertaken generic and country specific assessment on approaches and options for addressing legal, administrative and other infrastructure requirements so as to provide guidance and options for nuclear energy and its safe, secure and efficient use, for those Agency's Member States that are interested in considering or planning for the introduction of nuclear energy. The IAEA is well positioned to take a pivotal role in enhancing nuclear energy while ensuring 3Ss.

With its long and extensive experiences in the peaceful uses of nuclear energy and in the 10. belief that international cooperation contributes to the development of nuclear energy, Japan, in cooperation with the IAEA, has proactively engaged in international efforts to promote peaceful uses of nuclear energy in a way that promotes 3Ss. Japan has been encouraging and assisting those countries which have expressed interest in nuclear power to establish 3Ss and other necessary infrastructures before they actually embark upon nuclear programs. Japan has contributed to the Nuclear Security Fund to assist states, in particular Asian states, to upgrade their nuclear security capabilities. Japan also hosted seminars aimed at promoting the accession to the international counter-terrorism conventions and protocols. In the field of nuclear safety, Japan has conducted a series of training courses and seminars for regulatory experts and technicians of the neighboring Asian countries with a view to further enhancing nuclear safety in the respective countries. In the bilateral context, Japan requests, as a matter of policy, any state, with whom Japan enters into bilateral talks for nuclear cooperation agreements, to conclude the Additional Protocol beforehand. As part of Japan's efforts in the universalization of the Additional Protocol, it has conducted various seminars such as the National Seminar on the Additional Protocol in Vietnam.

Conclusion

11. The expansion of peaceful uses of nuclear energy seems to continue. It is important for the international community to deliberate how best to assist the countries concerned in further promoting their capabilities to develop 3Ss and other necessary infrastructures. International cooperation should be duly recognized as an essential part of the development of peaceful uses of nuclear energy. Japan will continue to engage in international efforts both bilaterally and multilaterally to promote the peaceful use of nuclear energy that is consistent with 3Ss with a view to the fullest implementation of article IV of the NPT.