Comment on the Proposal on Japan’s Nuclear Development in the 21st Century

Proposals of Japanese scientists concerning nuclear energy development in their country contain important positions relevant not only for Japan, but also for Russia and for the whole world. We would like to emphasize as the most important ones the positions that follow below.

The time has come to establish nuclear energy as a technology vital for energy security and sustainable development, and to take all the necessary steps in this connection. It should be understood that the future nuclear energy development will be closely intertwined with international policies, and some countries have come to an important turning point needing a fundamental revision of their governmental energy development programs.

Some countries with insufficient resources have reached the point of nuclear decision-making when, unless there is no corresponding international policy initiated by the developed countries, the process may become spontaneous and compromise the nuclear energy’s capability to solve the issue of global sustainable development.

Developed nuclear countries, in cooperation with the newly participating countries, should assume responsibilities for thorough implementation of basic principles of safety assurance, non-proliferation and radioactive waste management because any major accident resulting from irresponsible management or regulation could make people abandon using this energy source at all.

Developed countries should first of all establish a framework for cooperation and agree about the ways of solving the issues of high-level waste management and non-proliferation, which represent serious obstacles on the way of peaceful nuclear energy development.

Developed countries (and Japan in particular) having only a limited amount of natural resources should endeavor to take a proactive position in the international community, in order to assure their energy security on the long term. New strategic approaches should be looked for, establishment of international organizations initiated, and the respective steps taken towards this goal. It is necessary to abandon the current complacent approach to the urgency of solving the issues of nuclear energy development in developing countries, and to take, as soon as possible, all due steps towards recognizing the urgency of the respective proactive measures.

In order to meet their obligations under the Kyoto Protocol, developed countries have no other real alternative except positioning the nuclear energy positively and increasing its share in the energy mix to the maximum possible extent. Notwithstanding the obvious reality, the governments have mentioned the importance of nuclear energy on this plan in neither statement made before the 2008 Summit in Japan, thus delaying the solution of the sustainable development issue and making it virtually insolvable in the framework of the current development paradigm.

In order to solve the issues associated with sustainable development, it would be necessary to establish a long-term nuclear fuel supply system, for which fast neutron reactors and nuclear fuel cycle closing enterprises should be the key factors. (The reviewed document bypasses this issue). Governments should be more determined in pursuing goal-oriented long-term policies of fast reactor development and nuclear fuel cycle closing, in parallel with coordinating their national

* Prepared by the System Energy Research Group of Russian Research Centre “Kurchatov Institute”. Original document is enclosed.
interests with the global trends, in order to extend the resource base and reduce considerably the amount of high-level waste. In the same time, developed countries should demonstrate to the world their highest technology standards in these areas.

Developed countries have high opinion of their capability to solve nuclear energy development problems, but they should clearly understand that the new participants expect proactive and responsible cooperative actions from their part. Developed countries should demonstrate to the international community their understanding and realization of these problems, in order to improve their influence and be able to take proactive measures and maximum efforts to develop innovative technologies intended for subsequent long-lived high-level waste liquidation, solution of non-proliferation issues and resource base extension.

Any reorganization of the nuclear energy system would take time, while there is an urgent need of operative reaction to global changes, including cooperation with newly participating countries. In view of the above, nuclear energy development should be supported by national governments, in order to develop the basic principles and standards of this development in due time. Countries should make necessary steps right now – otherwise they could be hopelessly late to implement these necessary measures. Steps should be made without further delay in order to make the best use of private sector capabilities for solving different nuclear energy development issues.
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Tsutomu Yamaguchi, 93, survived both Hiroshima and Nagasaki blasts

Mr. Yamaguchi said he was three kilometers, or less than two miles, away from ground zero. His ear drums were ruptured and his upper torso was burned by the blast, which destroyed most of the city's buildings and killed 60,000 people.

Mr. Yamaguchi spent the night in a Hiroshima bomb shelter and returned to his hometown of Nagasaki the following day, according to interviews he gave over the years. The second bomb, known as "Fat Man," was dropped on Nagasaki on Aug. 9, killing 70,000 people.

Mr. Yamaguchi was in his Nagasaki office, telling his boss about the Hiroshima blast, when "suddenly the same white light filled the room," he said in an interview last March with The Independent, a London newspaper.

"I thought the mushroom cloud had followed me from Hiroshima," he said.

In an August interview with The Mainichi Daily News of Japan, he said, "I could have died on either of those days. Everything that followed is a bonus.

Japan surrendered six days after the Nagasaki attack.

Mr. Yamaguchi recovered from his wounds, went to work for the American occupation forces, became a teacher and eventually returned to work at Mitsubishi Heavy Industries. He was in good health for most of his life, said his daughter, Toshiko Yamashita, which is why he avoided joining in nuclear protests.

"He was so healthy, he thought it would have been unfair to people who really sick," Ms. Yamashita told The Independent.

"Afterwards he was fine," she said. "We hardly noticed he was a survivor." It is believed there were about 165 twice-bombed persons in Japan, known as "niyuu hinbusha," although municipal officials in both cities have said that Mr. Yamaguchi was the only person to be officially acknowledged as such.

Ms. Yamashita, who was born in 1948, said her mother had been "soaked in black rain and was poisoned" by the fallout from the Nagasaki blast. Her mother died in 2003 from kidney and liver cancers. She was 88.

"We think she passed the poison on to us," Ms. Yamashita said, noting that her brother died of cancer at age 59 and her sister had been chronically ill throughout her life.

In his later years, Mr. Yamaguchi finally began to speak out about the scourge of atomic weapons. He rarely gave interviews, but he wrote a memoir and was part of a 2006 documentary film about the double-bombing victims. He called for the abolition of nuclear weapons at a showing of the film at the United Nations that year.

At a lecture he gave in Nagasaki last June, Mr. Yamaguchi said he had written to President Barack Obama about banning nuclear arms. And Ms. Yamashita said he had recently been visited by the American film director James Cameron to discuss a film project on atomic bombs.

As a benefit of Mr. Yamaguchi's victim status, his funeral costs will be paid by the government.