Strategic Vision for Strengthening Cooperation in **Peaceful Uses of Atomic Energy Between the Republic** of India and the Russian Federation

December 11, 2014

- 1. Preamble
- 1(1). The Treaty of Friendship and Cooperation between the Russian Federation and the Republic of India signed on January 28, 1993 established a strong and long-term basis for cooperation between the two countries.
- 1(2). The Russian Federation and the Republic of India (hereinafter referred to as the "Sides"), based on the traditionally friendly relations between their governments and peoples, intend to actively develop mutually beneficial cooperation in the peaceful uses of atomic energy. Towards this, the Sides especially recognize the importance of the following documents signed between their Governments:
- · Agreement between the Government of the Russian Federation and the Government of the Republic of India on cooperation in the construction of additional nuclear power plant units at Kudankulam site as well as in the construction of Russian designed nuclear power plants at new sites in the Republic of India, signed on December 5, 2008 (hereinafter referred to as the "Agreement of 2008"); and
- · Agreement between the Government of the Russian Federation and the Government of the Republic of India on cooperation in the uses of atomic energy for peaceful purposes signed on March 12, 2010 (hereinafter referred to as the "Agreement of 2010").
- 1(3). The Sides acknowledged the importance of the "Roadmap for the serial construction of the Russian designed nuclear power plants in the Republic of India" signed on March 12, 2010 (hereinafter referred to as the "Roadmap").
- 1(4). The Sides also acknowledge the importance of the following two Memoranda of Understanding between the State Atomic Energy Corporation "Rosatom" (Russia) and the Department of Atomic Energy, Government of India: (i) concerning broader scientific and technical cooperation in the field of peaceful uses of nuclear energy signed on December 21, 2010 and (ii) on cooperation with Global Centre for Nuclear Energy Partnership of India signed on June 20, 2011.
- 1(5). The Sides welcome their high level of bilateral cooperation in the field of peaceful uses of atomic energy and its significant achievements. At the same time, the Sides recognize the substantial potential for broadening and strengthening of their cooperation in the nuclear power sector; research and development in nuclear power and non-power applications of atomic energy, and engineering works.
- 1(6). This potential has been emphasized during recent high-level political exchanges between the Sides, including the meeting between the President of the Russian Federation, Vladimir Putin and the Prime Minister of India, Narendra Modi on the sidelines of the BRICS Summit in Fortaleza, Brazil on July 15, 2014.
- 1(7). Acknowledging the importance of on-going cooperation, and in order to provide guidance for future cooperation, State Atomic Energy Corporation "Rosatom" (Russia) and Department of Atomic Energy, Government of India have prepared the present document, entitled "Strategic Vision for Strengthening Cooperation in Peaceful Uses of Atomic Energy between the Russian Federation and the Republic of India", with a view to provide strategic guidance for strengthening their cooperation in peaceful uses of atomic energy.
- 2. The current status of cooperation
- 2 (1). The Sides note with satisfaction their ongoing cooperation in civil nuclear energy sector, and affirm their mutual desire

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2 (2). The Sides express satisfaction over the progress towards putting into commercial operation Unit-1 of the Kudankulam Nuclear Power Plant (KKNPP), which achieved full rated power in July 2014. They also agreed to take necessary steps to expedite commissioning of Unit-2 of the KKNPP. The Sides welcomed the entry into force of the General Framework Agreement (GFA) of April 10, 2014 for KKNPP Units 3 and 4, with the signing of Amendment No. 1 to GFA as well as the signing of the contract for delivery of equipment with long manufacturing cycle and first priority equipment from the Russian Federation for implementation of projects for KKNPP Units 3 and 4.

3. Future development

3 (1). The Sides recognize that the agenda for their bilateral cooperation in the nuclear power sector is globally one of the largest between any two countries. They look forward to the construction of additional Russian-designed nuclear power units in India, cooperation in research and development of innovative nuclear power plants, and localization of manufacturing of equipment and fuel assemblies in India as the goal of their future collaboration, as described below.

3.1 Nuclear power

- 3.1(1). Conscious of India's ambitious economic growth strategy, which would require a significant enhancement of power generating capacity, the two Sides have decided to fast-track the implementation of agreed cooperation projects for Nuclear Power Plants. Both Sides will strive to complete the construction and commissioning of not less than 12 units in the next two decades, in accordance with the Agreement of 2008. Towards this objective, the Indian side agrees to expeditiously identify a second site, in addition to Kudankulam, for the construction of the Russian-designed nuclear power units in India. The Sides will join their expertise and resources to minimize the total cost and time of construction of nuclear power units.
- 3.1(2). Both Sides envision that the issue of the construction of further Russian-designed nuclear power plants in India beyond those mentioned in para 3.1(1) will be considered taking into account India's demand for power, the then available nuclear technologies including those that may be developed jointly, mutually acceptable technical and commercial terms, and the prevalent electricity tariffs.
- 3.1(3). The two Sides recognize that for the future sustainability of their robust cooperation, they will progressively and significantly enhance the scope of orders for materials and equipment from Indian suppliers and establish joint ventures, including by transfer of technology, as mutually agreed. This will include manufacturing of both main equipment and spares, with special priority for spares, for Russian-designed nuclear power units in India. The Joint Working Group on Nuclear Power will consider the proposals of the Sides to this effect.
- 3.1(4). The Sides will also explore opportunities for sourcing materials, equipment and services from Indian industry for the construction of the Russian-designed nuclear power plants in third countries.
- 3.1(5). Acknowledging the importance of maintenance of nuclear power plants for uninterrupted operation, both Sides will put maximum efforts into development of the cooperation in such directions as nuclear power plants technical maintenance and repair, modernization and retraining of personnel.
- 3.1(6). From a long-term perspective, the Sides also envision their cooperation in decommissioning of nuclear power plants.

3.2 The Nuclear Fuel Cycle

- 3.2(1). In the course of the construction of Russian designed nuclear power units in India as envisaged in para 3.1(1) of this document, the Sides will work on a priority basis on necessary arrangements for the fabrication in India of the nuclear fuel assemblies and their elements to be used in Russian-designed units, as envisaged in the Agreement of 2008. The two Sides will work on the implementation of Article 6.3 of the Agreement of 2010.
- 3.2(2). The Sides will examine the possibility of technical cooperation in mining activities within their territories. They will also collaborate in exploration and mining activities in third countries.

- 3.2(3). The Sides will develop a framework for collaboration in the field of radioactive waste management.
- 3.2(4). The Joint Working Group on the Nuclear Fuel Cycle, to be set up under Section 5 of this document, will elaborate possible approaches to the cooperation in the above-mentioned areas including facilities for spent fuel management.
- 3.3 Scientific and technical cooperation and radiation technologies
- 3.3(1). The Sides underline their desire for active cooperation in the field of scientific and technical cooperation and radiation technologies.
- 3.3(2). The Sides consider joint research in fast reactors, thorium fuel cycle, accelerator-blanket systems, high current protons and ion accelerator, and controlled thermo-nuclear fusion as important for the future of their strategic cooperation. The Sides also recognise the significant potential for bilateral cooperation in the field of non- energy applications of radiation technologies in areas such as industry, medicine, safety and agriculture.
- 3.3(3). The Sides welcome the signing of the Provisions for the Technical Data and Information Non-disclosure in the framework of cooperation in the field of peaceful uses of nuclear energy between the Russian State Atomic Energy Corporation Rosatom and the Department of Atomic Energy, Government of India. They agree that these Provisions will provide a new impetus to their scientific and technological cooperation in peaceful uses of nuclear energy.
- 4. Public awareness and education activity
- 4(1). The Sides consider their collaboration in the development of human resources in their countries as well as in third countries through advance training in all aspects of civilian nuclear sector as an important element of their bilateral cooperation.
- 4(2). The Sides acknowledge the value of educational activities to promote understanding and create a positive public perception of nuclear energy. Based on their shared positive experiences, the Sides plan to develop a pilot programme for integrated information centre, which can be replicated after evaluating its results.
- 5. Ways of implementation
- 5(1). The Sides agree to establish a Coordination Committee for cooperation in the peaceful uses of the atomic energy (hereinafter referred to as the "Committee"), which will oversee the entire range of bilateral cooperation, including the achievement of the objectives envisioned in this document. The Committee will be headed by Secretary, Department of Atomic Energy (India) and Director General, Rosatom (Russia). The Committee will meet once every year.
- 5(2). The Committee will be assisted in its task by three Joint Working Groups, each on (i) Nuclear Power, (ii) Nuclear Fuel Cycle and (iii) Scientific and Technical Cooperation, with the last Joint Working Group replacing the one established earlier to implement the Memorandum of Understanding between the State Atomic Energy Corporation "Rosatom" (Russia) and the Department of Atomic Energy, Government of India concerning broader scientific and technical cooperation in the field of peaceful uses of nuclear energy signed on December 21, 2010.
- 5(3) Both Sides agree that the document does not on its own create any legal or financial obligations for either Side.