- M) "Restricted data" means all data concerning (1) design, manufacture or utilization of nuclear weapons, (2) the production of special nuclear material, or (3) the use of special nuclear material in the production of energy, but shall not include data of a party which it has declassified or removed from the category of restricted data;
- N) "Sensitive nuclear facility" means any facility designed or used primarily for uranium enrichment, reprocessing of nuclear fuel, heavy water production, or fabrication of nuclear fuel containing plutonium;
- "Sensitive nuclear technology" means any information (including information incorporated in equipment or an important component) which is not in the public domain and which is important to the design, construction, fabrication, operation or maintenance of any sensitive nuclear facility, or other such information which may be so designated by agreement of the parties; but shall not include restricted data;
- (P) "Source material" means (1) uranium, thorium or any other material so designated by agreement of the parties, or (2) ores containing one or more of the foregoing materials in such concentration as the parties may agree from time to time;
- (Q) "Special nuclear material" means (1) plutonium, uranium 233, or uranium enriched in the isotope 235, or (2) any other material so designated by agreement of the parties.

Article 2 - Scope of Cooperation

- The parties shall cooperate in the use of nuclear energy for peaceful purposes in accordance with the provisions of this Agreement and their applicable treaties, national laws, regulations and license requirements.
- 2. Transfer of information, material, equipment and components under this Agreement may be undertaken directly between the parties or through authorised persons. Such transfers shall be subject to this Agreement and to such additional terms and conditions as may be agreed by the parties.



Article 3 - Transfer of Information

- Information concerning the use of nuclear energy for peaceful purposes may be transferred. Transfers of information may be accomplished through various means, including reports, data banks, computer programs, conferences, visits, and assignments of staff to facilities. Fields which may be covered include, but shall not be limited to, the following:
 - (A) Development, design, construction, operation, maintenance and use of reactors, and reactor experiments;
 - (B) The use of material in physical and biological research, medicine, agriculture and industry;
 - (C) Fuel cycle studies of ways to meet future world-wide civil nuclear needs, including multilateral approaches to guaranteeing nuclear fuel supply and appropriate techniques for management of nuclear wastes;
 - (D) Safeguards and physical protection;
 - (E) Health, safety and environmental considerations related to the foregoing; and
 - (F) Assessing the role nuclear power may play in national energy plans.
- 2. This Agreement does not require the transfer of any information which the parties are not permitted by law to transfer.
- 3. Restricted data shall not be transferred under this Agreement.
- 4. Sensitive nuclear technology shall not be transferred under this Agreement unless provided for by an amendment to this Agreement.

Article 4 - Transfer of Material, Byproduct Material, Equipment and Components

- Material, byproduct material, equipment and components may be transferred for applications consistent with this Agreement. Sensitive nuclear facilities and major critical components shall not be transferred under this Agreement.
- Low enriched uranium may be transferred for use as fuel in reactor experiments and in reactors, for conversion or fabrication, or for such other purposes as may be agreed by the parties.
- 3. The quantity of special nuclear material transferred under this Agreement shall not at any time be in excess of that quantity the parties agree is necessary for any of the following purposes: use in reactor experiments or the loading of reactors, the efficient and continuous conduct of such reactor experiments or operation of such reactors, and the accomplishment of other purposes as may be agreed by the parties.
- 4. Small quantities of special nuclear material may be transferred for use as samples, standards, detectors, targets and for such other purposes as the parties may agree. Transfers pursuant to this paragraph shall not be subject to the quantity limitations in paragraph 3.
- 5. The United States shall endeavour to take such actions as are necessary and feasible to ensure a reliable supply of nuclear fuel to South Africa, including the export of material on a timely basis and the availability of the capacity to carry out this undertaking during the period of this Agreement.

Article 5 - Storage and Retransfers

Plutonium and uranium 233 (except as contained in irradiated fuel elements), and high enriched uranium, transferred pursuant to this Agreement or used in or produced through the use of material or equipment so transferred shall only be stored in a facility to which the parties agree. Material, equipment and components transferred pursuant to this Agreement and any special nuclear material produced through the use of any such material or equipment shall not be transferred to unauthorized persons or, unless the parties agree, beyond the recipient Party's territorial jurisdiction.

Article 6 - Reprocessing and Enrichment

- Material transferred pursuant to this Agreement and material used in or produced through the use of material or equipment so transferred shall not be reprocessed unless the parties agree.
- 2. Plutonium, uranium 233, high enriched uranium and irradiated source or special nuclear material, transferred pursuant to this Agreement or used in or produced through the use of material or equipment so transferred, shall not be altered in form or content, except by irradiation or further irradiation, unless the parties agree.
- 3. Uranium transferred pursuant to this Agreement or used in any equipment so transferred shall not be enriched after transfer unless the parties agree.

Article 7 - Physical Protection

- Adequate physical protection shall be maintained with respect to source or special nuclear material and equipment transferred pursuant to this Agreement and special nuclear material used in or produced through the use of material or equipment so transferred.
- 2. The parties agree to the levels for the application of physical protection set forth in the Annex to this Agreement, which may be modified by mutual consent of the parties without amending this Agreement. The parties shall maintain adequate physical protection measures in accordance with these levels. These measures shall as a minimum provide protection comparable to the recommendations set forth in IAEA document INFCIRC/225/Revision 2 concerning the physical protection of nuclear material, or in any revision of that document agreed to by the parties.

- 3. The adequacy of physical protection measures maintained pursuant to this Article shall be subject to review and consultations by the parties periodically and whenever either party is of the view that revised measures may be required to maintain adequate physical protection.
- Each party shall identify those agencies or authorities having responsibilities for ensuring that levels of physical protection are adequately-met and having responsibility for coordinating response and recovery operations in the event of unauthorized use or handling of material subject to this Article. Each party shall also designate points of contact within its national authorities to cooperate on matters of out-of-country transportation and other matters of mutual concern.
- 5. The provisions of this Article shall be implemented in such a manner as to avoid undue interference in the parties' nuclear activities and so as to be consistent with prudent management practices required for the economic and safe conduct of their nuclear programs.

Article 8 - No Explosive or Military Application

Material, byproduct material, equipment and components transferred pursuant to this Agreement and material and byproduct material used in or produced through the use of any material, equipment or components so transferred shall not be used for any nuclear explosive device, for research on or development of any nuclear explosive device, or for any military purpose.

Article 9 - Safeguards

- Cooperation under this Agreement shall require the application of IAEA safeguards with respect to all nuclear activities within the territory of South Africa, under its jurisdiction or carried out under its control anywhere. Implementation of a safeguards Agreement pursuant to Article III (4) of the NPT shall be considered to fulfill this requirement.
- Source or special nuclear material transferred to South Africa pursuant to this Agreement and any source or special nuclear material used in or produced through the use of material, equipment or components so transferred shall be subject to safeguards in accordance with the agreement between South Africa and the IAEA for the application of safeguards in connection with the NPT, signed on 16 September 1991.



- 3. Source or special nuclear material transferred to the United States pursuant to this Agreement and any source or special nuclear material used in or produced through the use of any material, equipment or components so transferred shall be subject to the agreement between the United States of America and the IAEA for the application of safeguards in the United States of America, done at Vienna 18 November 1977, entered into force on 9 December 1980.
- 4. If either party becomes aware of circumstances which demonstrate that the IAEA for any reason is not or will not be applying safeguards in accordance with the agreement as provided for in paragraph 2 or paragraph 3, to ensure effective continuity of safeguards the parties shall immediately enter into arrangements with the IAEA or between themselves which conform with IAEA safeguards principles and procedures and with the coverage required by that paragraph and which provide assurance equivalent to that intended to be secured by the system they replace.
- 5. Each party shall take such measures as are necessary to maintain and facilitate the application of safeguards provided for under this Article.
- 6. Each party shall establish and maintain a system of accounting for and control of source and special nuclear material transferred pursuant to this Agreement and source and special nuclear material used in or produced through the use of any material, equipment or components so transferred. The procedures for this system shall be comparable to those set forth in IAEA Document INFCIRC/153 (Corrected), or in any revision of that document agreed to by the parties.
- 7. Upon the request of either party, the other party shall report or permit the IAEA to report to the requesting party on the status of all inventories of source and special nuclear material subject to this Agreement.
- 8. The provisions of this Article shall be implemented in such a manner as to avoid undue interference in the parties' nuclear activities and so as to be consistent with prudent management practices required for the economic and safe conduct of their nuclear programs.



Article 10 - Multiple Supplier Controls

If any agreement between either party and another nation or group of nations provides such other nation or group of nations rights equivalent to any or all of those set forth under Article 5 or 6 with respect to material, equipment or components subject to this Agreement, the parties may, upon request of either of them, agree that the implementation of any such rights will be accomplished by such other nation or group of nations.

Article 11 - Cessation of Cooperation

- 1. If either party at any time following entry into force of this Agreement:
 - (A) does not comply with the provisions of Article 5, 6, 7, 8, or 9 or;
 - (B) terminates, abrogates or materially violates a safeguards agreement with the IAEA:

the other party shall have the rights to cease further cooperation under this Agreement and to require the return of any material, equipment and components transferred under this Agreement and any special nuclear material produced through their use.

- 2. If South Africa at any time following entry into force of this Agreement detonates a nuclear explosive device, the United States shall have the same rights as specified in paragraph 1.
- 3. If the United States at any time following entry into force of this Agreement detonates a nuclear explosive device which contains nuclear material of South African origin or derived from South African source material transferred to the United States under this Agreement, South Africa shall have the same rights as specified in paragraph 1.
- 4. If either party exercises its rights under this Article to require the return of any material, equipment or components, it shall, after removal from the territory of the other party, reimburse the other party for the fair market value of such material, equipment or components. Fair market value for purposes of this Agreement shall be determined by negotiation between the parties.

Article 12 - Consultations and Environmental Protection

- The parties undertake to consult at the request of either party regarding the implementation of this Agreement and the development of further cooperation in the field of peaceful uses of nuclear energy.
- 2. The parties-shall consult, with regard to activities under this Agreement, to identify the international environmental implications arising from such activities and shall cooperate in protecting the international environment from radioactive, chemical or thermal contamination arising from peaceful nuclear activities under this Agreement and in related matters of health and safety.

Article 13 - Entry Into Force, Duration, and Amendment

- 1. This Agreement replaces the previous Agreement for Peaceful Nuclear Cooperation between the United States and South Africa signed 8 July 1957, as subsequently amended, which shall terminate upon the entry into force of this Agreement. Cooperation initiated under the previous Agreement shall continue in accordance with the provisions of this Agreement. The provisions of this Agreement shall apply to material and equipment subject to the previous Agreement. This Agreement shall enter into force on the date on which the parties exchange diplomatic notes informing each other that they have completed all applicable requirements for its entry into force, and shall remain in force for a period of 25 years. This term may be extended for such additional periods as may be agreed between the parties in accordance with their applicable requirements. This Agreement may be terminated at any time by either party on one year's written notice to the other party.
- 2. Notwithstanding the suspension, termination or expiration of this Agreement or any cooperation hereunder for any reason, Articles 5, 6, 7, 8, 9, and 11 shall continue in effect so long as any material, equipment or components subject to these articles remains in the territory of the party concerned or under its jurisdiction or control anywhere, or until such time as the parties agree that such material, equipment or components are no longer usable for any nuclear activity relevant from the point of view of safeguards.

The parties shall, at the request of either party, consult on amendments to this 3. Agreement. All amendments shall require the agreement in writing of both parties.

IN WITNESS WHEREOF the undersigned, being duly authorized, have signed this Agreement.

DONE at PRETORIA 25 TH day of August, 1995, in two originals in the English language.

FOR THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA:

FOR THE GOVERNMENT OF THE

UNITED STATES OF AMERICA:

ANNEX

Pursuant to paragraph 2 of Article 7, the agreed levels of physical protection to be ensured by the competent national authorities in the use, storage and transportation of the materials listed in the attached table shall as a minimum include protection characteristics as below.

Category III

Use and storage within an area to which access is controlled.

Transportation under special precautions including prior arrangements among sender, recipient and carrier, and prior agreement between entitles subject to the jurisdiction and regulation of supplier and recipient states, respectively, in case of international transport specifying time, place and procedures for transferring transport responsibility.

Category II

Use and storage within a protected area to which access is controlled, i.e., an area under constant surveillance by guards or electronic devices, surrounded by a physical barrier with a limited number of points of entry under appropriate control, or any area with an equivalent level of physical protection.

Transportation under special precautions including prior arrangements among sender, recipient and carrier, and prior agreement between entitles subject to the jurisdiction and regulation of supplier and recipient states, respectively, in case of international transport, specifying time, place and procedures for transferring transport responsibility.

Category I

Material in this category shall be protected with highly reliable systems against unauthorized use as follows:

Use and storage within a highly protected area, i.e., a protected area as defined for category is above, to which, in addition, access is restricted to persons whose trustworthiness has been determined, and which is under surveillance by guards who are in close communication with appropriate response forces. Specific measures taken in this context should have as their objective the detection and prevention of any assault, unauthorised access or unauthorized removal of material.

Transportation under special precautions as identified above for transportation of categories it and III materials and, in addition, under constant surveillance by escorts and under conditions which assure close communication with appropriate response forces.

TABLE: CATEGORIZATION OF NUCLEAR MATERIAL

Material	Form	Category		
			u u	lll a
1. Plutonium ^a	Unirradiated ^M	2 kg or more	Less than 2 kg but more than 500 g	500 g or less but more than 15 g
2. Uranium-235	Unirradiated b		· • · · · ·	. 198
	- uranium enriched to 20 % ²⁰⁵ U or more	5 kg or more	Less than 5 kg but more than 1 kg	1 kg or less but more than 15 g
	 uranium enriched to 10 % ²⁵U but less than 20 % 		10 kg or more	Less than 10 kg but more than 1 kg
	 uranium enriched above natural but less than 10 % ²³⁵U 	ē		10 kg or more
3. Uranium-233	Unirradiated ^b	2 kg or more	Less than 2 kg but more than 500 g	500 g or less but more than 15 g
4. irradiated fuel			Depleted or natural uranium, thorium or low-enriched fuel (less than 10 % fissile content) # 9	

^{4/} All plutonium except that with isotopic concentration exceeding 80 % in plutonium-238.

^b/ Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 100 rads/hour at one metre unshielded.

²/ Quantities not failing in Category III and natural uranium should be protected in accordance with prudent management practice.

^{4/} Although this level of protection is recommended, it would be open to States, upon evaluation of the specific circumstances, to assign a different category of physical protection.

²⁷ Other fuel which by virtue of its original fissile material content is classified as Category I and II before irradiation may be reduced one category level while the radiation level from the fuel exceeds 100 rads/hour at one metre unshielded.

AGREED MINUTE

During the negotiation of the Agreement for Cooperation between the Republic of South Africa and the United States of America Concerning Peaceful Uses of Nuclear Energy ("Agreement") signed today, the following understandings, which shall be an integral part of the Agreement, were reached.

Coverage of Agreement

Material, equipment and components transferred from the territory of one party to the territory of the other party, whether directly or through a third country, will be regarded as having been transferred pursuant to the Agreement only if, prior to transfer, the appropriate government authority of the recipient party confirms in writing to the appropriate government authority of the supplier party that such material, equipment or components will be subject to the Agreement.

For the purposes of implementing the rights specified in Articles 5 and 6 with respect to special nuclear material produced through the use of nuclear material transferred pursuant to the Agreement and not used in or produced through the use of equipment transferred pursuant to the Agreement, such rights shall in practice be applied to that proportion of special nuclear material produced which represents the ratio of transferred material used in the production of the special nuclear material to the total amount of material so used, and similarly for subsequent generations.

With reference to Article 8 it is understood that "military purpose" does not include power to a military base drawn from the civil power network or production of radioisotopes to be used for diagnosis or therapeutic purposes in a military hospital.

Safeguards

If either party becomes aware of circumstances referred to in paragraph 4 of Article 9, either party shall have the rights listed below, which rights shall be suspended if both parties agree that the need to exercise such rights is being satisfied by the application of IAEA safeguards under arrangements pursuant to paragraph 4 of Article 9;

- (1) To review in a timely fashion the design of any equipment transferred pursuant to the Agreement, or of any facility which is to use, fabricate, process, or store any source or special nuclear material so transferred or any special nuclear material used in or produced through the use of such material or equipment;
- (2) To require the maintenance and production of records and of relevant reports for the purpose of assisting in ensuring accountability for material transferred pursuant to the Agreement and any source material or special nuclear material used in or produced through the use of any material, equipment or components so transferred; and
 - (3) To designate personnel, in consultation with the other party, who shall have access to all places and data necessary to account for the material in paragraph 2, to inspect any equipment or facility referred to in paragraph 1, and to install any devices and make such independent measurements as may be deemed necessary to account for such material. Such personnel shall, if either party so requests, be accompanied by personnel designated by the other party.

FOR THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA:

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA:



AGREEMENT

BETWEEN

THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA

AND

THE GOVERNMENT OF THE RUSSIAN FEDERATION

ON STRATEGIC PARTNERSHIP AND COOPERATION IN THE FIELDS OF NUCLEAR POWER AND INDUSTRY



The Government of the Republic of South Africa and the Government of the Russian Federation, hereinafter jointly referred to as the "Parties" and separately as a "Party";

CONSIDERING that both States are members of the International Atomic Energy Agency (hereinafter referred to as "the IAEA") and the Nuclear Suppliers Group, as well as Parties to the Treaty for Non-Proliferation of Nuclear Weapons as of July 1, 1968;

ACKNOWLEDGING the Agreement between the Government of the Russian Federation and the Government of the Republic of South Africa on Cooperation in the field of Peaceful Uses of Nuclear Energy as of November 20, 2004;

TAKING INTO ACCOUNT the intentions of the Government of the Republic of South Africa for the implementation of the large-scale national plan for the power sector development, involving the construction by 2030 of new nuclear power plant (hereinafter referred to as "NPP") units in the Republic of South Africa;

NOTING the rights and obligations of the Parties under the Agreement between the Government of the Russian Federation and the Government of the Republic of South Africa on the Promotion and Reciprocal Protection of Investments as of November 28, 1998;

REFERRING to the Joint Presidential Statement on establishment of comprehensive strategic partnership between the Russian Federation and the Republic of South Africa of March 26, 2013;

AIMING to further expand and deepen the mutually beneficial economic, scientific and technical cooperation between the Russian Federation and the Republic of South Africa in the fields of nuclear energy and industry for peaceful uses, based on the principles of equality, non-interference in the internal affairs and respect of the sovereignty of both States; and



CONVINCED that legal fixation of the strategic partnership in the fields of nuclear power and industry will contribute to the development of cooperation in other areas between the Russian Federation and the Republic of South Africa;

Hereby agree as follows:

Article 1

This Agreement creates the foundation for the strategic partnership and cooperation in the fields of nuclear power and industry for peaceful uses between the Parties, aimed at the successful implementation of the national plan for the power sector development of the Republic of South Africa, based on the principles of equality and mutual benefit.

Article 2

Cooperation within the framework of this Agreement shall be implemented strictly in compliance with the Parties' respective national legislations and with respect to international treaties, to which the states of the Parties are signatories.

Article 3

The Parties shall create the conditions for the development of strategic cooperation and partnership in the following areas:

 (i) development of a comprehensive nuclear new build program for peaceful uses in the Republic of South Africa, including enhancement of key elements of nuclear energy infrastructure in accordance with IAEA recommendations;

- design, construction, operation and decommissioning of NPP units based on the VVER reactor technology in the Republic of South Africa, with total installed capacity of about 9.6 GW;
- (iii) design, construction, operation and decommissioning of the multipurpose research reactor in the Republic of South Africa;
- (iv) development of joint business in the fields of radioisotopes manufacturing and global marketing, including the involvement of the multi-purpose research reactor facilities planned for construction in the Republic of South Africa;
- enhancement and implementation of the program on the development of South-African human resources for work at the nuclear facilities, including NPPs, in the Republic of South Africa;
- (vi) support the enhancement of the regulatory framework in the field of nuclear and radiation safety in the Republic of South Africa, including development of relevant legal base, licensing system and regulation;
- (vii) strengthening of nuclear radiation safety system in the field of peaceful uses of nuclear energy in the Republic of South Africa;
- (viii) support the enhancement of the industrial base development program essential for the re-development of nuclear energy in the Republic of South Africa;
 - (ix) localization of the manufacture of components for the NPP equipment in the Republic of South Africa;
 - (x) assist in the integration of the developed nuclear joint manufacturing capacities and capabilities in the supply chain as well as for the joint marketing and promotion of the produced products to the third countries markets;
- (xi) enhancement of security and assurance of physical protection of nuclear facilities in the Republic of South Africa;
- (xii) strengthening and adaptation of nuclear and radiological emergency response system in the Republic of South Africa;

- (xiii) radioactive waste management in the Republic of South Africa;
- (xiv) rendering of the nuclear fuel cycle front-end services to secure the needs of the new units of NPPs to be built in the Republic of South Africa, including the accession of the respective South-African organization to the International Uranium Enrichment Center;
- (xv) support of feasibility activities for site investigation for NPP construction in the Republic of South Africa; and
- (xvi) activities in other areas that may be agreed upon by the Parties in writing through diplomatic channels.

- 1. The Parties collaborate in areas as outlined in Article 3 of this Agreement which are needed for the implementation of priority joint projects of construction of two new NPP units with VVER reactors with the total capacity of up to 2,4 GW at the site selected by the South African Party (either Koeberg NPP, Thyspunt or Bantamsklip) in the Republic of South Africa and other NPP units of total capacity up to 7,2GW at other identified sites in the Republic of South Africa and construction of a multi-purpose research reactor at the research center located at Pelindaba, Republic of South Africa. The mechanism of implementation of these priority projects will be governed by separate intergovernmental agreements, in which the Parties shall agree on the sites, parameters and installed capacity of NPP units planned to be constructed in the Republic of South Africa.
- 2. The Parties shall create such conditions as to issue timely permits (licenses) for nuclear energy and industry capacities design, construction, commissioning, operation and decommissioning, as well as related export and import of facilities, equipment, technologies, nuclear and radioactive materials, special non-nuclear materials and services in the field of peaceful uses of nuclear energy in

accordance with the Parties' respective national legislations.

Article 5

- 1. For the purpose of implementing this Agreement each Party shall designate competent authorities:
 - (i) For the Russian Party the Competent Authority shall be the State Atomic Energy Corporation "Rosatom" (for all areas of cooperation) and the Federal Service for Ecological, Technological and Atomic Inspectorate (for support of enhancement of the regulatory framework in the field of nuclear and radiation safety in the Republic of South Africa, including development of relevant legal base, licensing system and regulation);
 - (ii) For the South-African Party the Competent Authority shall be the Department of Energy of the Republic of South Africa.
- 2. The Parties shall promptly notify each other in writing through diplomatic channels of any change of Competent Authorities, their titles or functions or designation of new Competent Authorities.

Article 6

- 1. The Parties shall establish a Joint Coordination Committee to provide guidance, to coordinate and to control the implementation of this Agreement.
- 2. Each Party shall appoint the representatives of the relevant government institutions to the Joint Coordination Committee.
- 3. Representatives of the Parties' Competent Authorities shall be appointed as the co-chairs of the Joint Coordination Committee. The co-chairs of the Joint Coordination Committee shall develop and agree on the Term of Reference for the Committee.

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4. In three years of entry into force of this Agreement the co-chairs of the Joint Coordination Committee shall make comprehensive review of the progress in the implementation of this Agreement and provide appropriate recommendations to the Competent Authorities of the Parties regarding further implementation of this Agreement.

Article 7

Cooperation in areas as outlined in Article 3 of this Agreement, will be governed by separate agreements between the Parties, the Competent Authorities, as well as by agreements (contracts) between Russian and (or) South African authorized organizations, which are involved by the Competent Authorities of the Parties for the implementation of cooperation in the framework of this Agreement. The Competent Authorities of the Parties can, by mutual consent, involve third countries' organizations for the implementation of particular cooperation areas in the framework of this Agreement.

Article 8

The sources and format of financing of the activities within the implementation of cooperation areas as outlined in Article 3 of this Agreement will be agreed on after consultations and fixed by separate agreements between the Parties.

Article 9

For the purpose of implementation of this Agreement the South African Party will facilitate the provision of a special favorable regime in determining tax and non-tax payments, fees and compensations, which will be applied to the projects implemented in the Republic of South Africa within the areas of cooperation as outlined in Article 3 of this Agreement, subject to its domestic legislation.

Article 10

Implementation of the areas of cooperation as outlined by Article 3 of this Agreement shall be with gradual increase and shall be mutually agreed upon by the Competent Authorities of the Parties. The terms for the scope of supplies of equipment, materials and services for the projects developed and implemented in terms of the framework of this Agreement shall be provided by South African enterprises, and also by joint ventures to be set up for this purpose.

Article 11

The conditions for the protection, use and distribution of the Intellectual Property rights under this Agreement shall be determined in agreements between the Parties and agreements (contracts) between Russian and (or) South African authorized organizations concluded in accordance with Article 7 of this Agreement.

- 1. Information specified as STATE SECRET of the Russian Federation or CLASSIFIED INFORMATION of the Republic of South Africa shall not be exchanged under this Agreement.
- 2. Information transferred under this Agreement or created from the implementation thereof and regarded by the transferring Party as CONFIDENTIAL shall be clearly marked as such.
- 3. The Party transferring the information under this Agreement shall mark such information in the Russian language as «Для служебного пользования » and in English language as "CONFIDENTIAL".

- 4. The Party receiving information marked in the Russian language as «Для елужебного пользования» and in English language as "CONFIDENTIAL" shall protect it at a level equivalent to the level of protection applied by the transferring Party to such information. Such information shall not be disclosed or transferred to a third party without the written consent of the transferring Party.
- 5. The Parties shall limit the number of individuals having access to information which the transferring Party regards as confidential.
- 6. Such information shall be treated in the Russian Federation as OFFICIAL. INFORMATION of LIMITED DISTRIBUTION and shall be protected in accordance with the legislation of the Russian Federation.
- 7. Such information shall be treated in the Republic of South Africa as «RESTRICTED INFORMATION» and shall be protected in accordance with the legislation of the Republic of South Africa.
- 8. All information transferred under this Agreement shall be used exclusively in accordance with this Agreement.

- 1. Nuclear material, equipment, special non-nuclear material and relevant technology, as well as material (goods) of dual purpose shall be exported under this Agreement in accordance with the Parties' obligations, arising from the Treaty on Non-proliferation of Nuclear Weapons of 1 July, 1968 and other international treaties that contain provisions on export control to which the Russian Federation and/or the Republic of South Africa are parties.
- 2. Nuclear material, equipment, special non-nuclear material and relevant technology received by the Republic of South Africa under this Agreement, and

nuclear material, special non-nuclear material, facilities and equipment produced thereof or as a result of their use, shall—

- (i) not be used for manufacturing of nuclear weapons and other nuclear explosive devices or for achieving any other military purpose;
- (ii) be under the IAEA safeguards in accordance with the Agreement for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons between the Republic of South Africa and the IAEA of 16 September, 1991 (INFCIRC/394) throughout the entire period of their location under the jurisdiction of the Republic of South Africa;
- (iii) be ensured with measures of physical protection at levels not lower than the levels recommended by the IAEA document "The Physical Protection of Nuclear Material and Nuclear Facilities" (INFCIRC/225/Rev.5);
- (iv) be re-exported or transferred from the jurisdiction of the Republic of South Africa to any other country only with prior written consent of the Russian Federation and under above-mentioned conditions.
- 3. Nuclear material transferred to the Republic of South Africa under this Agreement shall not be enriched to 20% or more in the isotope uranium-235.
- 4. Nuclear material transferred to the Republic of South Africa under this Agreement shall not be enriched and reprocessed without prior written consent of the Russian Federation.
- 5. Equipment and material (goods) of dual purpose and related technology received from the Russian Federation under this Agreement and any of their reproduced copies, shall—
 - (i) be used only for the declared purposes, unconnected with any activities related to the manufacturing of nuclear explosive devices;
 - (ii) not be used in nuclear fuel cycle related activities that are not under the IAEA safeguards;

(iii) not be copied, modified, re-exported or transferred to any third party without the written consent of the Russian competent authority in compliance with the legislation of the Russian Federation.

6. The Parties shall cooperate on matters of export control of equipment, material (goods) and relevant technology. Control over the use of supplied nuclear and special non-nuclear material, equipment and relevant technology shall be executed by means agreed upon through consultations between the Parties.

Article 14

Technology and facilities for chemical reprocessing of irradiated fuel, isotopic uranium enrichment and heavy water production, their major components or any items produced thereof, as well as uranium enriched to 20 percent or more in uranium-235, plutonium and heavy water shall not be transferred under this Agreement.

Article 15

1. The authorized organization of the South African Party at any time and at all stages of the construction and operation of the NPP units and Multi-purpose Research Reactor shall be the Operator of NPP units and Multi-purpose Research Reactor in the Republic of South Africa and be fully responsible for any damage both within and outside the territory of the Republic of South Africa caused to any person and property as a result of a nuclear incident occurring at NPP or Multi-purpose Research Reactor and also in relation with a nuclear incident during the transportation, handling or storage outside the NPP or Multi-purpose Research Reactor of nuclear fuel and any contaminated materials or any part of NPP or Multi-purpose Research Reactor equipment both within and outside the territory of the Republic of South Africa. The South African Party shall ensure that, under no circumstances shall the Russian Party or its authorized



organization nor Russian organizations authorized and engaged by their suppliers be liable for such damages as to the South African Party and its Competent authorities, and in front of its authorized organizations and third parties.

- 2. Nuclear liability due to nuclear incident occurring when handling and transporting the nuclear fuel shall be transferred from the authorized Russian organization to the authorized South African organization after the physical handing over of the nuclear fuel at a place determined in separate agreements (contracts) as concluded in accordance with Article 7 of this Agreement.
- 3. Should the Vienna Convention on Civil Liability for Nuclear Damage enter into force for the Republic of South Africa, the issues of civil liability for nuclear damage under this Agreement for the South African Party shall be regulated by this Vienna Convention.

Article 16

The Parties shall settle all disputes arising from the interpretation of implementation of this Agreement amicably by Parties' Competent Authorities consultations or negotiations through diplomatic channels. In case of any discrepancy between this Agreement and agreements (contracts), concluded under this Agreement, the provisions of this Agreement shall prevail.

- 1. This Agreement shall enter into force on the date of the receipt through diplomatic channels of the final written notification of the completion by the Parties of internal government procedures necessary for its entry into force.
- 2. This Agreement shall remain in force for a period of twenty (20) years and shall automatically be renewed for a further period of ten (10) years unless



terminated by either Party giving I (one) year written notice in advance through diplomatic channels to the other Party of its intention to terminate it.

- 3. Upon the receipt by one of the Parties of the written notification from the other Party on the termination of this Agreement, the Parties shall hold consultations immediately on the possibility of implementing all obligations of the Parties under this Agreement, in accordance with the domestic law of the Parties.
- 4. The termination of this Agreement shall not affect the rights and obligations of the Parties which have arisen as a result of the implementation of this Agreement before its termination, unless the Parties agree otherwise.
- 5. This Agreement may be amended by mutual consent of the Parties through an Exchange of Notes between the Parties through diplomatic channels. Such amendments shall form an integral part of this Agreement.
- 6. The termination of this Agreement shall not affect the performance of any of the obligations under agreements (contracts) which arise during the validity period of this Agreement and are uncompleted at the moment of such termination, unless the Parties agree otherwise.

IN WITNESS WHEREOF the undersigned, being duly authorised thereto by their respective Governments, have signed and sealed this Agreement in two originals in the Russian and English languages, all texts being equally authentic. In the case of divergence of interpretation, the English text shall be used.

FOR THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA FOR THE GOVERNMENT OF THE RUSSIAN FEDERATION



AGREEMENT

BETWEEN

THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA

AND

THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF CHINA

ON

COOPERATION IN THE FIELD OF

CIVIL NUCLEAR ENERGY PROJECTS





PREAMBLE

The Government of the Republic of South Africa and the Government of the People's Republic of China (hereinafter jointly referred to as the "Parties" and separately as a "Party"),

CONSIDERING the comprehensive strategic partnership between our two countries;

RECOGNIZING the Agreement between the Government of the People's Republic of China and the Government of the Republic of South Africa on Cooperation in the Peaceful Uses of Atomic Energy signed on June 21, 2006, at Cape Town; and the Memorandum of Understanding between the Government of the People's Republic of China and the Government of the Republic of South Africa on Cooperation in the Energy Sector, signed on August 24, 2010, at Beijing;

TAKING INTO ACCOUNT that the Republic of South Africa is planning civil nuclear energy new-builds with a total capacity of 9.6 GWe, with the aim of satisfying the increasing power demand, reduce carbon emissions, facilitate localisation for industrialisation, economic and social development, and is also willing to conduct cooperation with the People's Republic of China based on the significant on-going and long-standing cooperation between the two countries;

MINDFUL that the People's Republic of China possesses a complete nuclear industry, has the capabilities in design, construction, operation and management of various research reactors, and commercial reactors, as well as in nuclear fuel fabrication and supply, and is willing to participate in the civil nuclear energy development in the Republic of South Africa and to form long term and strategic collaborative relationships with local businesses;

EXPRESSING the willingness of both Parties to foster increased cooperation through investment, development of technology and expertise, and the construction of civil nuclear energy projects in the Republic of South Africa for their mutual benefit;

AFFIRMING their commitment towards further enhancing the bilateral cooperation in the civil nuclear energy sector, by encouraging and facilitating the building of closer relationships between relevant Government agencies, intermediaries, independent regulatory agencies, academic, legal and financial institutions, developers and other enterprises active in the civil nuclear energy sector;

HEREBY AGREE as follows:





Article 1

- 1. Cooperation between the Parties under this Agreement shall follow the principle of mutual benefit and reciprocity based on the recognition of the achievements and developments in the field of nuclear energy made by the People's Republic of China and the Republic of South Africa, as well as the willingness and interest of the relevant Chinese and South African nuclear energy enterprises to participate in the development, construction and operation of civil nuclear energy projects in South Africa, China and any other third country. The Governments may authorize state or private organizations of the Parties to participate in the implementation of this Agreement.
- 2. The Parties will advance and support cooperation in the civil nuclear energy sector in their respective countries.

- 1. The Parties will encourage and facilitate their respective enterprises to cooperate in the civil nuclear energy sector, including but not limited to, the fields of experience exchange, personnel training, site evaluation and selection, localization, project planning, project management, consultancy, enhance infrastructure development, fundamental research, design and engineering, investment and financing, construction, operation, maintenance, equipment and fuel supply as well as development of new technology for civil nuclear energy new-builds in the Republic of South Africa and the People's Republic of China, and any other third country.
- 2. The Parties undertake to support enterprises of both countries with their expertise and technologies into their civil nuclear energy sectors, by providing information and the necessary guidance regarding their laws, policies and regulations which are relevant to the civil nuclear energy projects but subject to the applicable national legislation.
- 3. Both Parties will consider how to realize the goals of this Agreement. This may, where appropriate, include signing agreements as well as contracts between enterprises, intermediaries, independent regulatory agencies, academic, legal and financial institutions and the developers for civil nuclear energy projects and agreeing on the step by step implementation plans in accordance with the Peaceful Uses Agreement and this Framework Agreement.





Article 3

- 1. It is the understanding of both Parties that participation of the relevant civil nuclear energy enterprises in the construction of nuclear energy projects, must comply with the applicable domestic laws of the respective countries and any other necessary independent regulatory requirements. The Parties shall protect all the relevant legal rights of investors and project participants in accordance with the applicable laws. The Parties also agree to uphold the international non-proliferation framework, including the relevant international treaties, Conventions and IAEA safeguards.
- 2. It is the understanding of both Parties that the implementation of any civil nuclear energy project pursuant to this Agreement in the Republic of South Africa and the People's Republic of China or any other third country, should be based on equal and mutual benefit regarding the commercial negotiations and agreements of the respective Parties as well as the long term development of the organizations respectively.

- 1. The Competent Authorities responsible for the implementation of this Agreement and for coordinating all cooperation programmes entered into under this Agreement shall be-
 - (a) in the case of the Republic of South Africa, the Department of Energy; and
 - (b) in the case of the Government of the People's Republic of China, the China National Energy Administration.
- 2. The Parties shall establish a working group for the purpose of the joint development of plans of cooperation as well as implementation and analysis of the work to be performed in the areas referred to in Article 2. This Working group may report to the Energy Sub-Committee of China and South Africa Bi-National Commission.
- 3. The Co-Chairs, Representatives and Secretariat members of the Working Group will be appointed by China National Energy Administration and the Department of Energy of the Republic of South Africa respectively. The Co-Chairs will be Director-General of Nuclear Power Department of China National Energy Administration and the Director-General of the Department of Energy for the Republic of South Africa. The Representatives of the Working Group will include but not limited to personnel from the relevant government agencies, where appropriate, jointly agreed personnel from the civil nuclear energy enterprises.





- 4. The agenda, time and place of the meetings of the Working Groups shall be agreed upon by the Parties.
- 5. The Working Group may establish sub-working group for conducting collaboration in specific area or project. The sub-working group so established, will stay active until such a time as the work is completed.
- 6. The subsistence and travel expenses of participants attending to cooperation programmes and meetings of implementing agencies or Working Groups contemplated under this Agreement shall be borne by the respective Parties of their implementing agencies.

Article 5

The Working Group tasks include:

- 1. Reviewing progress of the implementation and delivery set out in this Agreement, and to report to and seek approval of specific projects from the Parties respectively;
- 2. Coordination and support of implementation of specific projects as referred to in Article 2 of this Agreement;
- 3. Facilitating cooperation between Chinese and South African enterprises in the civil nuclear energy field, to deepen their mutual understanding and cooperation by, where appropriate, holding exhibitions, seminars and symposiums;
- To coordinate and seek to solve difficulties and eliminate barriers to investment, joint projects and market entry; and
- 5. Any other areas which may be agreed to by the Parties within the framework of this Agreement.

- The outcome or results of specific programmes of cooperation carried out under this Agreement, which are not yet in the public domain, shall be kept confidential by the Parties.
- 2 If a Party wishes to share the results with a third party, prior written consent of the other Party shall be obtained.

- 3 The outcome and results of specific programmes of cooperation carried out under this Agreement shall be published only with the written consent of both Parties.
- 4 Any notification concerning this Agreement shall be addressed in writing to the Parties through an Exchange of Notes between Parties through the diplomatic channel.

Article 7

Any dispute arising out of the interpretation, application or implementation of this Agreement shall be settled amicably between the Parties through negotiations or consultations.

Article 8

This Agreement may be amended by mutual consent of the Parties through an Exchange of Notes between the Parties through the diplomatic channel.

- Upon signature of the Agreement, the Agreement shall enter into force on the date on which Parties have notified each other in writing, through the diplomatic channel, that their respective internal procedures necessary for its entry into force have been completed.
- This Agreement shall be valid for twenty years and shall be automatically extended for a further term of ten years, unless either Party notifies the other Party, six months in advance through the diplomatic channel, of its intention to terminate the Agreement.
- 3. The termination of this Framework Agreement shall not affect the implementation of any arrangement and/or contracts made during the period of its validity but still not completed by the date of its termination, unless otherwise agreed upon in writing by the Parties through the diplomatic channel.
- 4. Either Party may propose an amendment to the Agreement by means of a written notice through the diplomatic channel to the other Party. The amendment will be effected by mutual written consent between the Parties,





IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective Governments, have signed and sealed this Agreement, in the Chinese and English languages, both texts being equally authentic.

FOR THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA

FOR THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF CHINA

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J.

AGREEMENT BETWEEN THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF CHINA AND THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA ON COOPERATION IN THE FIELD OF CIVIL NUCLEAR ENERGY PROJECTS

PREAMBLE

The Government of the People's Republic of China and the Government of the Republic of South Africa (hereinafter jointly referred to as the "Parties" and separately as a "Party"),

CONSIDERING the comprehensive strategic partnership between our two countries;

RECOGNIZING the Agreement between the Government of the People's Republic of China and the Government of the Republic of South Africa on Cooperation in the Peaceful Uses of Atomic Energy signed on June 21, 2006, at Cape Town; and the Memorandum of Understanding between the Government of the People's Republic of China and the Government of the Republic of South Africa on Cooperation in the Energy Sector, signed on August 24, 2010, at Beijing;

TAKING INTO ACCOUNT that the Republic of South Africa is planning civil nuclear energy new-builds with a total capacity of 9.6 GWe, with the aim of satisfying the increasing power demand, reduce carbon emissions, facilitate localisation for industrialisation, economic and social development, and is also willing to conduct cooperation with the People's Republic of China based on the significant on-going and long-standing cooperation between the two countries;

MINDFUL that the People's Republic of China possesses a complete nuclear industry, has the capabilities in design, construction, operation and management of various research reactors, and commercial reactors, as well as in nuclear fuel fabrication and supply, and is willing to participate in the civil nuclear energy development in the Republic of South Africa and to form long term and strategic collaborative relationships with local businesses;



EXPRESSING the willingness of both Parties to foster increased cooperation through investment, development of technology and expertise, and the construction of civil nuclear energy projects in the Republic of South Africa for their mutual benefit;

AFFIRMING their commitment towards further enhancing the bilateral cooperation in the civil nuclear energy sector, by encouraging and facilitating the building of closer relationships between relevant Government agencies, intermediaries, independent regulatory agencies, academic, legal and financial institutions, developers and other enterprises active in the civil nuclear energy sector;

HEREBY AGREE as follows:

Article 1

- 1. Cooperation between the Parties under this Agreement shall follow the principle of mutual benefit and reciprocity based on the recognition of the achievements and developments in the field of nuclear energy made by the People's Republic of China and the Republic of South Africa, as well as the willingness and interest of the relevant Chinese and South African nuclear energy enterprises to participate in the development, construction and operation of civil nuclear energy projects in South Africa, China and any other third country. The Governments may authorize state or private organizations of the Parties to participate in the implementation of this Agreement.
- 2. The Parties will advance and support cooperation in the civil nuclear energy sector in their respective countries.

Article 2

1. The Parties will encourage and facilitate their respective enterprises to cooperate in the civil nuclear energy sector, including but not limited to, the fields of experience exchange, personnel training, site evaluation and selection, localization, project planning, project management, consultancy, enhance infrastructure development, fundamental research, design and engineering, investment and financing, construction, operation, maintenance, equipment and fuel supply as well as development of new technology for civil nuclear energy new-builds in the Republic of South Africa and the People's Republic of China, and any other third country.

- 2. The Parties undertake to support enterprises of both countries with their expertise and technologies into their civil nuclear energy sectors, by providing information and the necessary guidance regarding their laws, policies and regulations which are relevant to the civil nuclear energy projects but subject to the applicable national legislation.
- 3. Both Parties will consider how to realize the goals of this Agreement. This may, where appropriate, include signing agreements as well as contracts between enterprises, intermediaries, independent regulatory agencies, academic, legal and financial institutions and the developers for civil nuclear energy projects and agreeing on the step by step implementation plans in accordance with the Peaceful Uses Agreement and this Framework Agreement.

Article 3

- 1. It is the understanding of both Parties that participation of the relevant civil nuclear energy enterprises in the construction of nuclear energy projects, must comply with the applicable domestic laws of the respective countries and any other necessary independent regulatory requirements. The Parties shall protect all the relevant legal rights of investors and project participants in accordance with the applicable laws. The Parties also agree to uphold the international non-proliferation framework, including the relevant international treaties, Conventions and IAEA safeguards.
- 2. It is the understanding of both Parties that the implementation of any civil nuclear energy project pursuant to this Agreement in the Republic of South Africa and the People's Republic of China or any other third country, should be based on equal and mutual benefit respecting the commercial negotiations and agreements of the respective Parties as well as the long term development of the organizations respectively.

- 1. The Competent Authorities responsible for the implementation of this Agreement and for coordinating all cooperation programmes entered into under this Agreement shall be—
 - (a) in the case of the Government of the People's Republic of China, the China National Energy Administration; and

- (b) in the case of the Republic of South Africa, the Department of Energy.
- 2. The Parties shall establish a working group for the purpose of the joint development of plans of cooperation as well as implementation and analysis of the work to be performed in the areas referred to in Article 2. This Working group may report to the Energy Sub-Committee of China and South Africa Bi-National Commission.
- 3. The Co-Chairs, Representatives and Secretariat members of the Working Group will be appointed by China National Energy Administration and the Department of Energy of the Republic of South Africa respectively. The Co-Chairs will be Director-General of Nuclear Power Department of China National Energy Administration and the Director-General of the Department of Energy for the Republic of South Africa. The Representatives of the Working Group will include but not limited to personnel from the relevant government agencies, where appropriate, jointly agreed personnel from the civil nuclear energy enterprises.
- 4. The agenda, time and place of the meetings of the Working Groups shall be agreed upon by the Parties.
- 5. The Working Group may establish sub-working group for conducting collaboration in specific area or project. The sub-working group so established, will stay active until such a time as the work is completed.
- 6. The subsistence and travel expenses of participants attending to cooperation programmes and meetings of implementing agencies or Working Groups contemplated under this Agreement shall be borne by the respective Parties or their implementing agencies.

Article 5

The Working Group tasks include:

- 1. Reviewing progress of the implementation and delivery set out in this Agreement, and to report to and seek approval of specific projects from the Parties respectively;
- 2. Coordination and support of implementation of specific projects as referred to in Article 2 of this Agreement;
- 3. Facilitating cooperation between Chinese and South African enterprises in the civil nuclear energy field, to deepen their mutual understanding and

cooperation by, where appropriate, holding exhibitions, seminars and symposiums:

- 4. To coordinate and seek to solve difficulties and eliminate barriers to investment, joint projects and market entry; and
- 5. Any other areas which may be agreed to by the Parties within the framework of this Agreement.

Article 6

- 1. The outcome or results of specific programmes of cooperation carried out under this Agreement, which are not yet in the public domain, shall be kept confidential by the Parties.
- 2 If a Party wishes to share the results with a third party, prior written consent of the other Party shall be obtained.
- 3 The outcome and results of specific programmes of cooperation carried out under this Agreement shall be published only with the written consent of both Parties.
- 4 Any notification concerning this Agreement shall be addressed in writing to the Parties through an Exchange of Notes between Parties through the diplomatic channel.

Article 7

Any dispute arising out of the interpretation, application or implementation of this Agreement shall be settled amicably between the Parties through negotiations or, consultations.

Article 8

This Agreement may be amended by mutual consent of the Parties through an Exchange of Notes between the Parties through the diplomatic channel.

Article 9

1. Upon signature of the Agreement, the Agreement shall enter into force on