

AMENDMENT TO THE AGREEMENT BETWEEN THE GOVERNMENT OF  
THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF  
THE RUSSIAN FEDERATION OF SEPTEMBER 23, 1997,  
CONCERNING COOPERATION REGARDING PLUTONIUM PRODUCTION REACTORS

The Government of the United States of America and the Government of the Russian Federation, hereinafter referred to as the Parties,

Taking into account the changed situation, particularly regarding the possibility of adding an option of creating fossil fuel energy sources for implementing the Agreement between the Government of the United States of America and the Government of the Russian Federation Concerning Cooperation Regarding Plutonium Production Reactors of September 23, 1997 (hereinafter referred to as the Agreement), since signature of the Agreement; and

Acknowledging that the Executive Agents of the Parties are prepared to conclude an agreement to replace the Agreement between the Department of Defense of the United States of America and the Ministry of the Russian Federation for Atomic Energy Concerning the Modification of the Operating Seversk (Tomsk Region) and Zheleznogorsk (Krasnoyarsk Region) Plutonium Production Reactors of September 23, 1997, in order to reflect the amendments to the Agreement made herein;

Have agreed as follows:

Article I

The following amendments shall be made to the Agreement:

1. Paragraph 2 of Article I shall be amended to read as follows:

"2. All reactors listed in Annex II to this Agreement, which is an integral part of this Agreement, shall cease, by December 31, 2005, for the ADE-4 and ADE-5 reactors at Seversk, and by December 31, 2006, for the ADE-2 reactor at Zheleznogorsk, their production of non-reactor-grade plutonium, each reactor by either, as mutually agreed by the Executive Agents of the Parties, undergoing modification or being permanently shut down as soon as it has been replaced by alternative fossil-fuel energy sources, the capacity of which will be mutually agreed by the Executive Agents of the Parties. For any reactor undergoing modification, after the completion of such modification, that reactor shall permanently cease operation at the end of its normal lifetime, consistent with prudent safety considerations."
2. Paragraph 1 of Article II shall be amended to read as follows:

"1. The U.S. Party shall provide, as appropriate, subject to the availability of appropriated funds for this purpose, and subject to the Agreement between the Department

of Energy of the United States of America and the Ministry of the Russian Federation for Atomic Energy Concerning the Cessation of Plutonium Production at the Operating ADE-4 and ADE-5 Reactors in Seversk (Tomsk Region) and ADE-2 Reactor in Zheleznogorsk (Krasnoyarsk Region), which will be governed as specified in Article I, paragraph 4, of that agreement, step-by-step funding for either, depending on the option agreed upon, cooperative efforts on the reactor modifications or cooperative efforts toward creating alternative fossil-fuel energy sources, as stated in and in accordance with Article I, paragraph 2, of this Agreement. Any disputes between the parties to that agreement pertaining to that agreement and arising in the course of its implementation, shall be resolved by the Executive Agents of the parties."

3. The last sentence of Article III shall be amended to read as follows:

"If any reactor listed in Annex II to this Agreement is modified, it will utilize an alternative type of fuel including uranium derived from dismantled nuclear weapons."

4. Article VII shall be deemed null and void and therefore deleted, and Articles VIII through XI, as well as all references to those Articles, shall be renumbered accordingly.

5. The first sentence of Article VII (as renumbered) shall be amended to read as follows:

"The Parties shall designate Executive Agents to implement this Agreement and its Annexes and Subsidiary Arrangements as follows: for the U.S. Party, the Department of Energy; for the Russian Party, the Ministry of the Russian Federation for Atomic Energy."

6. Article I(c) of Annex III to the Agreement shall be amended to read as follows:

"(c) any reactor identified in Annex II to this Agreement that is modified, to ensure that, once modified in accordance with Article I, paragraph 2 of this Agreement (hereinafter referred to as being "modified"), it operates only in the agreed modified mode (Subsidiary Arrangement C)."

7. In Subsidiary Arrangement A-2 to Annex III to the Agreement:

a. In the last sentence of Article I, the words "when these reactors" shall be deleted and replaced with the words "when each of these reactors", and the word "cease" shall be deleted and replaced with the word "ceases".

b. Paragraph 2 of Article II shall be amended to read as follows:

"2. The Russian Party shall report data necessary for monitoring of the plutonium production reactors specified in Article I of this Subsidiary Arrangement and shall allow for monitoring at these reactors as specified below, in order to ensure that these reactors remain in a non-operating status. For the ADE-2, ADE-4, and ADE-5 reactors, this data shall include notification that each reactor has shut down, to be provided by the time it permanently ceases power production."

8. Paragraph 1(e) of Article II of Subsidiary Arrangement B to Annex III to the Agreement shall be amended to read as follows:

"(e) For each reactor in Annex II, the 6-month submissions and declarations described in sub-paragraphs (a) and (c) above shall continue at least until the reactor is permanently shut down or until core modification is complete and the reactor is restarted with the new type of core, as specified pursuant to paragraph 2 of Article I of the Agreement. However, if spent fuel produced by any such reactor, before it is permanently shut down or modified, has not yet been reprocessed at that time, the 6-month submissions shall continue until all such spent fuel from that reactor has been reprocessed and its plutonium has been placed under monitoring in the storage facility. The cumulative total amount of such plutonium, based on projected estimates, will be at least 9 metric tons when it has all been reprocessed."

9. In Subsidiary Arrangement C to Annex III to the Agreement:

a. Article I shall be amended to read as follows:

"Article I

"1. This Arrangement concerns the following obligations: in Article I, paragraph 2, of the Agreement, that, for all reactors listed in Annex II, at Seversk, by December 31, 2005, and at Zheleznogorsk, by December 31, 2006, their production of non-reactor-grade plutonium shall cease either by undergoing modification or by permanently shutting down; in Article III of the Agreement that cessation by undergoing modification will require the cessation of production by the reactors listed in Annex II of spent fuel containing plutonium whose combined Pu-240 plus Pu-238 isotopic concentration is less than 20 percent of total Pu, averaged over the total fuel discharged in any one batch, and also in Article III that once any such reactor is modified, it will utilize an alternative type of fuel including uranium derived from dismantled nuclear weapons; and in Article IV that the plutonium produced after entry into force of the Agreement in the reactors identified in Annex II, and any high-enriched uranium recovered from spent fuel discharged from any reactor that is modified, shall not be used in nuclear weapons. Measurements and

monitoring activities described below are designed to enhance confidence in the above-mentioned obligations.

"2. This Arrangement applies to fresh fuel charging, and to spent-fuel discharge and spent-fuel storage areas of any of the reactors ADE-2 at Zheleznogorsk and ADE-4 and ADE-5 at Seversk (the "reactors") that is modified. It will continue to apply to fresh fuel charging and to each spent fuel discharge area until the reactor is permanently shut down, and to each spent-fuel storage area as long as the Agreement is in force."

b. In Article II:

(i) in paragraph 1, the words "each of the reactors" shall be deleted and replaced with the words "each modified reactor"; and

(ii) in paragraph 3, the words "each of these reactors" shall be deleted and replaced with the words "each modified reactor", and the words "into the reactors" shall be deleted and replaced with the words "into the reactor";

c. In Article III:

(i) in the first sentence of paragraph 1, the words "into each reactor" shall be deleted and replaced with the words "into a modified reactor", and in the last sentence of that paragraph the words "each modified reactor" shall be deleted and replaced with the words "the modified reactor";

(ii) in paragraph 2, the words "each reactor" shall be deleted and replaced with the words "a modified reactor"; and

(iii) in paragraph 5, the words "modified reactors" shall be deleted and replaced with the words "modified reactor", and the words "reactors prior to their modification" shall be deleted and replaced with the words "reactor prior to its modification";

d. In Article IV:

(i) in paragraph 1, the words "each reactor" shall be deleted and replaced with the words "each modified reactor";

(ii) in paragraph 2, the word "reactors" shall be deleted and replaced with the word "reactor";

(iii) in the first sentence of paragraph 3, the words "each reactor" shall be deleted and replaced with the words "each modified reactor"; and

(iv) in paragraph 4, the word "each" shall be deleted and replaced with the word "the";

e. In paragraph 1 of Article V, the words "discharged from the reactors" shall be deleted and replaced with the words "discharged from a modified reactor".

Article II

This Amendment shall enter into force upon signature, in accordance with Article XI, paragraph 2, of the Agreement.

DONE at *Vienna*, in duplicate, this *12th* day of March, 2003, each in the English and Russian languages, both texts being equally authentic.

FOR THE GOVERNMENT OF  
THE UNITED STATES OF AMERICA:



FOR THE GOVERNMENT OF  
THE RUSSIAN FEDERATION:

