

**PROTOCOL OF MEETING**  
**BETWEEN THE UNITED STATES AND THE RUSSIAN FEDERATION**  
**ON THE REPLACEMENT OF RUSSIAN PLUTONIUM PRODUCTION REACTORS**

To further the agreements reached by Presidents Clinton and Yeltsin on January 14, 1994, and by Vice President Gore and Prime Minister Chernomyrdin on December 16, 1993, delegations of the U.S. and the Russian Federation met on March 14 - 16, 1994, to agree on a plan for replacement of plutonium production reactors with alternate energy sources. The sides stressed the historic importance of this task and their desire to avoid the risks associated with weapons-grade fissile material.

The Russian side proposed that, upon approval by the Government of the Russian Federation, the heads of the Russian and U.S. governments enter into a mutual agreement to cease military use of plutonium separated after the date of the agreement. This agreement would include provisions for compliance. Further, the Russian side proposed that Russia, within one year after creation of an alternate source of energy, would cease production and chemical separation of weapons-grade plutonium. The Russian side noted that both of these cessation and compliance provisions must be met and that the agreement would require that each side permit inspection of its relevant plutonium production facilities as well as the storage sites for the plutonium produced by the reactors in Tomsk and Krasnoyarsk.

The Russian side considers it possible to perform conversion work on the Tomsk and Krasnoyarsk-26 reactors in order to terminate the production of weapons-grade plutonium.

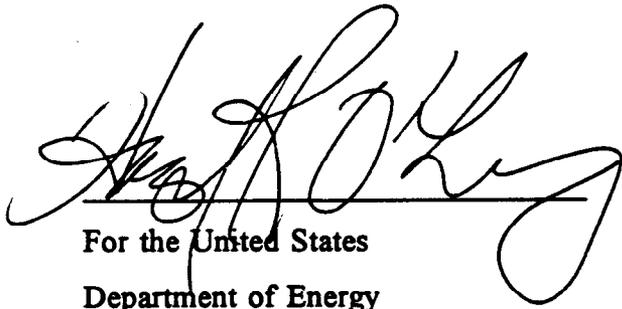
In working group discussions the Russian delegation described specific options to meet the heat and power needs of Tomsk and Krasnoyarsk which would permit the reactors to be shut down. The Russian side indicated that these options are at different stages of development. Further work is necessary for the projects to be considered for external financing.

For Tomsk and Tomsk-7, the sides agreed that development of combined heat and power stations based on aeroderivative gas turbines fueled by natural gas is the preferred option to replace the heat and power provided by the Tomsk reactors. The Russian side stated that pre-feasibility analyses have been completed. It proposed that the next step be a full feasibility study which would develop additional analyses necessary to proceed with financing the project. The U.S. Department of Energy stated that it is prepared to assist in securing financing for the completion of a feasibility study that would examine fully the gas turbine option and the potential for cost-effective improvements in energy efficiency.

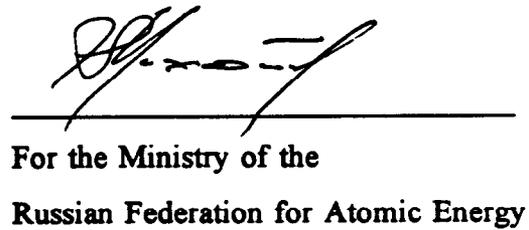
For Krasnoyarsk, the sides agreed that the alternate energy facility needed to provide electricity and district heat for Krasnoyarsk-26 is a new coal-fired power plant which is being built south of the city. The sides agreed to undertake two parallel efforts. The first element would be the completion of a pre-feasibility study on finishing the coal-fired facility. This pre-feasibility study would be completed by the middle of May 1994. The second element would be a review and revision of an existing Russian feasibility study that had been completed prior to the start of construction. The U.S. side will make recommendations to meet the requirements of Western financial institutions and private sector investment and recommendations to attract means of financing as soon as possible. The Russian side agreed to update its feasibility study to reflect these recommendations.

The sides agreed that a Joint Steering Committee would be convened to select the participants to implement the provisions of this Protocol, monitor progress, and identify and resolve problems. A report on the implementation of the provisions of this Protocol will be completed by the third meeting of the Joint U.S.-Russian Commission on Economic and Technological Cooperation.

Done in Washington, DC, on March 16, 1994, in English and Russian language texts.



For the United States  
Department of Energy



For the Ministry of the  
Russian Federation for Atomic Energy