



United States Department of State

Washington, D.C. 20520

BUREAU OF NONPROLIFERATION AFFAIRS

MEMORANDUM FOR JANICE DUNN LEE
NUCLEAR REGULATORY COMMISSION

Enclosed is an Executive Branch analysis covering the proposed export to Ukraine of 970.129 grams of U-235 contained in 1,755.36 grams of uranium in the form of uranium oxide reference materials enriched to a maximum 93.18 percent. The reference materials are being supplied by the New Brunswick National Laboratory under the Department of Energy Materials Protection Control and Accounting (MPC&A) Program to the National Academy of Science of Ukraine, Kiev Institute for Nuclear Research. The reference materials will be used as calibration standards for safeguards verification measurements.

As stated in my letter of April 9, 2001, the Executive Branch, on the basis of its review of this case, has concluded that the requirements of the Atomic Energy Act, as amended, have been met and that the proposed export would not be inimical to the common defense and security of the United States. Ukraine has adhered to the provisions of the U.S.-Ukraine Agreement for Cooperation.

Therefore, the Executive Branch recommends issuance of the requested export license.

A handwritten signature in black ink, appearing to read "R. J. K. Stratford".

Richard J. K. Stratford
Director
Nuclear Energy Affairs

Enclosure: analysis.

Attachment 4

EXPORT LICENSE APPLICATION ANALYSISXSNM03174

Destination: Ukraine

Transaction: The Department of Energy of behalf of New Brunswick Laboratory has applied for authorization to export to Ukraine 970.129 grams of U-235 contained in 1,755.36 grams of uranium in the form of uranium oxide reference materials enriched to a maximum of 93.18 percent. The reference materials are being supplied by the New Brunswick National Laboratory under the Department of Energy Materials Protection Control and Accounting (MPC&A) Program to the National Academy of Science of Ukraine, Kiev Institute for Nuclear Research. The materials will be used as calibration standards in nondestructive uranium enrichment measurements to verify nuclear materials inventories for safeguards reporting.

Date of Application: November 21, 2000

1. Applicable Agreement for Cooperation

The proposed export will be subject to the terms and conditions of the Agreement for Cooperation Between the Government of the United States of America and the Government of the Republic of Ukraine Concerning Peaceful Uses of Nuclear Energy which entered into force on May 28, 1999. This was confirmed by letter from the Embassy of Ukraine, dated [DATE], a copy of which is enclosed with the Executive Branch cover letter.

Ukraine has adhered to all provisions of that Agreement for Cooperation.

2. Extent to Which Export Criteria Are Met

A. Section 127 Criteria

As provided in Section 127 of the Atomic Energy Act, as amended, the following criteria govern exports for peaceful nuclear uses from the United States of source material, special nuclear material, production or utilization facilities, and any sensitive nuclear technology:

Criterion (1)

“IAEA safeguards as required by Article III(2) of the Treaty will be applied with respect to any such material or facilities proposed to be exported, to any such material or facilities previously exported and subject to the applicable agreement for cooperation, and to any special nuclear material used in or produced through the use thereof.”

Ukraine is a Party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), having deposited its instrument of accession ratification on December 5, 1994 and its Agreement with the International Atomic Energy Agency to maintain safeguards on all its peaceful nuclear activities entered into force on January 22, 1998 (INFCIRC/550).

Article 9 "Safeguards" of the U.S. - Ukraine Agreement for Cooperation provides that safeguards will be applied to material transferred or used in or produced through the use of transferred material, equipment or components.

Therefore, it is the Executive Branch view that criterion (1) is met.

Criterion (2)

"No such material, facilities, or sensitive nuclear technology proposed to be exported or previously exported and subject to the applicable agreement for cooperation, and no special nuclear material produced through the use of such materials, facilities, or sensitive nuclear technology, will be used for any nuclear explosive device or for research on or development of any nuclear explosive device."

As a non-nuclear weapon state Party to the NPT, Ukraine is bound not to acquire, or manufacture nuclear explosive devices for any purpose.

Article 8 "No Explosive or Military Applications" of the U.S. Ukraine Agreement for Cooperation provides that material, equipment or components transferred and material produced through the use of such material equipment or components shall not be used for any nuclear explosive device, for research on or development of any nuclear explosive device, or for any military purpose.

It is therefore the Executive Branch view that criterion (2) is met.

Criterion (3)

“Adequate physical security measures will be maintained with respect to such material or facilities proposed to be exported and to any special nuclear material used in or produced through the use thereof. Following the effective date of any regulations promulgated by the Commission pursuant to Section 304(d) of the Nuclear Non-Proliferation Act of 1978, physical security measures shall be deemed adequate if such measures provide a level of protection equivalent to that required by the applicable regulations.”

The Executive Branch has assessed the physical security measures maintained by the Government of Ukraine with respect to nuclear material and determined that they are adequate for the material covered by this license application.

Article 7 “ Physical Protection” of the U.S.-Ukraine Agreement for Cooperation provides that adequate physical protection shall be maintained with respect to source or special material and equipment transferred pursuant to the Agreement and special nuclear material used in or produced through the use of material or equipment so transferred. Article 7 further provides that these measures shall as a minimum provide protection comparable to the recommendation set forth in the current version of IAEA Document INFCIRC/225, concerning the physical protection of nuclear material.

Therefore it is the view of the Executive Branch that criterion (3) is met.

Criterion (4)

"No such materials, facilities or sensitive nuclear technology proposed to be exported, and no special nuclear material produced through the use of such material will be retransferred to the jurisdiction of any other nation or group of nations unless the prior approval of the United States is obtained for such retransfer. In addition to other requirements of law, the United States may approve such retransfer only if the nation or group of nations designated to receive such retransfer agrees that it shall be subject to the conditions required by this section."

Article 5 "Storage and Retransfers" of the U.S.-Ukraine Agreement for Cooperation provides that material, equipment and components transferred pursuant to the Agreement and any special nuclear material produced through the use of any such material or equipment shall not be retransferred beyond the recipient party's territorial jurisdiction unless the parties agree.

Therefore it is the Executive Branch view that criterion (4) is met.

Criterion (5)

“No such material proposed to be exported and no special nuclear material produced through the use of such material will be reprocessed, and no irradiated fuel elements containing such material removed from a reactor shall be altered in form or content, unless the prior approval of the United States is obtained for such reprocessing or alteration.”

Article 6 “Reprocessing and Enrichment” of the U.S.-Ukraine Agreement for Cooperation provides that material transferred pursuant to the Agreement or produced through the use of material or equipment so transferred shall not be reprocessed, altered in form or content, or further enriched unless the parties agree.

Therefore, it is the view of the Executive Branch that criterion (5) is met.

Criterion (6)

“No such sensitive nuclear technology shall be exported unless the foregoing conditions shall be applied to any nuclear material or equipment which is produced or constructed under the jurisdiction of the recipient nation or group of nations by or through the use of any such exported sensitive nuclear technology.”

The proposed export does not involve the transfer of sensitive nuclear technology. Criterion (6) is, therefore, not applicable.

B. Section 128 Criterion

Section 128 a. (1) of the Atomic Energy Act, as amended, establishes the following additional criterion: "As a condition of continued United States export of source material, special nuclear material, production or utilization facilities, and any sensitive nuclear technology to non-nuclear-weapon states, no such export shall be made unless IAEA safeguards are maintained with respect to all peaceful nuclear activities in, under the jurisdiction of, or carried out under the control of such state at the time of the export."

Since Ukraine is a Party to the NPT and has entered into an agreement with the IAEA to maintain safeguards on all of its peaceful nuclear activities, it is the view of the Executive Branch that this criterion is met.

3. Additional Factors

The Executive Branch believes the framework of commitments, assurances, and safeguards is adequate for the purposes of this export.

4. Inimicality Judgment

Based on review of the proposed export, it is the judgment of the Executive Branch that the proposed export will not be inimical to the common defense and security and that the requested license should be issued.