



International Atomic Energy Agency

INFORMATION CIRCULAR

INF

INFCIRC/549/Add. 9/2
27 March 2000

GENERAL Distr.
ENGLISH¹
Original: RUSSIAN

COMMUNICATION RECEIVED FROM CERTAIN MEMBER STATES CONCERNING THEIR POLICIES REGARDING THE MANAGEMENT OF PLUTONIUM

1. The Director General has received a letter, dated 11 February 2000, from the Ministry for Atomic Energy of the Russian Federation (MINATOM). In keeping with the Russian Federation's commitment under the Guidelines for the Management of Plutonium (contained in INFCIRC/549 of 16 March 1998 and hereinafter referred to as the "Guidelines"), the government of the Russian Federation, in the enclosure of the letter of 11 February 2000, attaches a statement relating to its national strategy for the use of plutonium stocks and the establishment of a suitable fuel cycle in the Russian Federation; and, in accordance with Annexes B and C of the Guidelines, makes available data on its national holdings of civil unirradiated plutonium and of estimated quantities of plutonium contained in spent civil reactor fuel, as of 31 December 1999.
2. In the light of the request expressed by the Russian Federation in its note verbale of 1 December 1997 concerning its policies regarding the management of plutonium (INFCIRC/549 of 16 March 1998), the texts of the enclosures to the letter of 11 February 2000 are attached for the information of all Member States.

¹ An English translation of the texts has been provided by the Russian Federation.

STRATEGY FOR THE USE OF PLUTONIUM STOCKS AND THE ESTABLISHMENT OF A SUITABLE FUEL CYCLE IN THE RUSSIAN FEDERATION

Overall strategy for plutonium use

In developing its plutonium management strategy, Russia is proceeding from the following main assumptions:

1. Plutonium, as a nuclear material, has unique energy potential, is nationally owned, and can be put to maximum effective use under Russia's national energy strategy
2. The ultimate strategic goal is to make full use of plutonium's energy potential, with unused waste and residues being converted to a state that makes their subsequent use for military purposes impossible and ensures their secure ecological isolation.
3. Once approved, plans for plutonium utilization must be implemented in a manner which ensures that it is stored, transported and handled in accordance with the highest national and international standards with respect to nuclear safety, ecology, physical protection, accounting and control.

Russia's national fuel management strategy is to make maximum effective use of its plutonium through the development of appropriate plant and technology, while observing the established international and national safety, non-proliferation and environmental safety standards. Russia's strategy provides for the possibility of collaboration with foreign partners/countries on the basis of all the commitments undertaken under the relevant agreements.

Overall fuel cycle strategy

Russia's nuclear fuel strategy is based on the concept of a closed fuel cycle and the establishment of corresponding production capacity and technology.

Individual components of a closed fuel cycle already exist (spent fuel reprocessing for various types of reactor), but others require specific research and considerable capital investment (production capacity for MOX and new type of fuel).

Russian is participating in bi- and multilateral international co-operation on problems of plutonium utilization, in order to take full account of international thinking on the matter and of the experience gained in solving the attendant problems.

Material excess to defense requirements

As announced by the President of Russian (G-8 meeting in Moscow, April 1996), up to 50 tones of plutonium released from military stocks in fulfillment of strategic offensive arms limitation treaties will be removed completely from the military sector and placed in special storage at the "Mayak" site. Russia has expressed its willingness to place this material under international control in the framework of the Tripartite Initiative, once suitable arrangements have been made and the control procedures agreed/in accordance with schedule the storage at the "Mayak" site will be ready for loading in 2002.

Use of excess plutonium

The handling of plutonium excess to defense needs will be carried out in the framework of the overall strategy for the use of plutonium as an energy resource. This achieves two objectives - irreversible conversion of the plutonium to a state preventing its return to the military sector, and full utilization of the energy potential of the military plutonium.

The use of excess military plutonium in the form of MOX fuel will provide a natural means of including it in the overall nuclear power fuel cycle. The problems of industrial MOX fuel fabrication are currently being resolved both in national programs and in the framework of international co-operation.

Complete plutonium inventory

In accordance with the Guidelines on the Management of Plutonium, Russian is providing notification of the total amount of civil plutonium either in separated and fresh form (Annex B) or in the form of irradiated fuel from nuclear power plants and research reactors (Annex C). Amount of excess plutonium will be declared after loading of this plutonium in the storage at the "Mayak".

Annual figures for civil unirradiated plutonium

Totals for the country*)

As at 31 December 1999

1.	Unirradiated separated plutonium in product stores at reprocessing plants	30 900 kg
2.	Unirradiated separated plutonium in the course of manufacture or fabrication and plutonium contained in unirradiated products at fuel or other fabrication plants or elsewhere	-
3.	Plutonium in unirradiated MOX fuel or other fabricated products at reactor sites or elsewhere**)	200 kg
4.	Unirradiated separated plutonium held elsewhere***)	900 kg

*) rounded up to 100 kg

**) Plutonium in unirradiated MOX fuel at research reactor sites

***) Separated plutonium used for research purposes - critical assemblies, fuel for research reactors, etc.

Estimated quantities of plutonium contained in spent fuel from civil reactor

Totals for the country*)

As at 31 December 1999

1.	Plutonium contained in spent fuel at civil reactor sites	47 000 kg
2.	Plutonium contained in spent fuel at reprocessing plants	4 000 kg**)
3.	Plutonium contained in spent fuel held elsewhere	20 000 kg

*) Rounded up to 100 kg.

**) Corrected data in comparison with declared data for 1998 which was incorrect due to technical mistake.