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LETTER DATED 30 MAY 1994 FROM THE CHARGE D'AFFAIRES A.I. OF THE PERMANENT MISSION OF THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA TO THE UNITED NATIONS ADDRESSED TO THE PRESIDENT OF THE SECURITY COUNCIL

I have the honour to transmit herewith a Document presented by the DPRK Delegation to the IAEA Delegation at their Working-Level Consultation on 27 May 1994, Pyongyang and Answers by a Spokesman for the Ministry of Foreign Affairs of the Democratic People's Republic of Korea to questions put by the Korean Central News Agency on 28 May 1994.

I should be grateful if you would have the present letter and its annexes circulated as a document of the Security Council.

(Signed) KIM Su Man
Chargé d'affaires a.i.
Deputy Permanent Representative

Annex I

The Method for Preserving Technical Possibility of later Measurement of Fuel Rods being applied to the on-going Fuel Rods Discharge Operation at the Experimental Atomic Power Plant presented by the DPRK Delegation to the IAEA Delegation at their Working-Level Consultation on 27 May 1994, Pyongyang

I. Purpose of This Method and Background of Its Application

The Democratic People's Republic of Korea (DPRK) has begun the refuelling campaign at the Experimental Atomic Power Plant, according to its operating plan.

Due to its unique status based on a temporary suspension of its declared withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the DPRK is in a position, at the present stage, only to ensure the continuity of safeguards, but not routine or ad hoc inspections.

Our principled position is that the selection and securing of some of the discharged fuel rods, as requested by the International Atomic Energy Agency (IAEA) with respect to the refuelling campaign, belong to the category of the Agency's ad hoc inspection activities, and therefore, that these activities could be permitted only after the DPRK's unique NPT status will have been lifted.

The below-explained method is the method devised and applied by the Safeguards Department of the General Department of Atomic Energy in consultation with the facility operators and after their serious and painstaking research work, with a view to preserving technical possibility of such selection and securing requested by the Agency, as our goodwill measure, which resupposes, of course, the lifting of the DPRK's unique NPT status.

This document was prepared in response to the request for a written presentation of the method, made by the IAEA delegation during the DPRK-IAEA consultation in Pyongyang, May 25-27, 1994.

II. Description of the Method

1) The refuelling campaign, the fuel transfer channel and all the fuel rods, stored both in the spent fuel pond and in the damaged fuel rod storage, remain under the Agency's strict containment and surveillance.

- The core and the movements of the refuelling machine are closely monitored by the two surveillance cameras installed in the reactor hall where the refuelling campaign takes place.

- The spent fuel rods discharged from the core are measured and counted by the computerized spent fuel rod counter system with silicon semiconductor detectors, fission chambers, ionization chambers and position sensors, installed in the fuel transfer channel.

- All the fuel discharging channels are controlled by the thermal luminescence detectors and seals.

- Two surveillance cameras are installed in the spent fuel storage building.

- In particular, for the purpose of an effective use being made of the Agency's surveillance equipment during the refuelling operation, we provided, during the tenth inspection, arrangements to satisfy all the Agency's requirements, including the replacement of computers in the spent fuel rod counter and its parts, the installation of the uninterruptable power supply for surveillance devices, and the provision of lighting system in the spent fuel storage building, etc.

- These measures, therefore, provide full assurances that there is no diversion of nuclear material during the discharge operation. This was confirmed by the Agency inspectors.

2) Fuel rods in the core are transferred into the spent fuel pond, with the possibility of reconstructing the fuel channels being maintained.

- Fuel rods are discharged by the refuelling machine in the sequence of one channel group to the next channel group.

- Forty fuel rods from four channels are discharged into one basket.

- Such basket is stored on the designated position in the spent fuel pond.

- Correct records are kept by the operators to show the identification number of the baskets, the channel-wise number of fuel rods in baskets and the position of baskets in the spent fuel pond.

3) The channels of fuel rods and the position of rods in the fuel channels can be reconstructed at an appropriate time.

- Gamma ray measurements are performed at the top and bottom parts of each fuel rod in the baskets.

- The neutron flux distribution is calculated along the fuel channels into which the fuel rods were loaded.

- The position of each fuel rods is determined on the basis of the value of the gamma ray measurements and the calculated value of the neutron flux distribution.

- The above method has been proven through experiments in the dry and wet conditions.

* This method would require a little more work of measurements than the selection of fuel rods from the core, but this is the solely rational and reasonable method that befits our current circumstances.

4) The identification numbers of baskets and the fuel channel numbers in baskets and the position of the baskets in the spent fuel pond are identified by the Agency inspectors who are present during the refuelling campaign.

This measure represents our goodwill and maximum tolerance motivated by our sincere desire to demonstrate the integrity of our nuclear activities and to resolve the nuclear issue peacefully.

Annex II

Answers by a Spokesman for the Ministry of Foreign Affairs of the Democratic People's Republic of Korea to questions put by the Korean Central News Agency on 28 May 1994

The Democratic People's Republic of Korea (DPRK) and the International Atomic Energy Agency (IAEA/Agency) held a working-level consultation in Pyongyang from 25 to 27 May, with regard to the refuelling campaign now underway at the five megawatt Experimental Atomic Power Plant.

The consultation focussed mainly on how to preserve technical possibility for the IAEA to measure the spent fuel rods at a later date, in case routine and ad hoc inspections are to be performed in the DPRK after a package solution to the nuclear issue will have been agreed upon at further rounds of DPRK-USA talks.

As has been reported, we are conducting the refuelling campaign while the DPRK is in the unique status based on a temporary suspension of the effectuation of its declared withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

We have made clear our goodwill position that, in this situation, we are not in a position to permit the Agency's routine or ad hoc inspection, but that we are prepared to fully maintain the continuity of safeguards in line with our unique NPT status and further that we would proceed with our refuelling campaign in such a way as to preserve technical possibility for the Agency to select and measure the discharged fuel rods at a later date.

Even the United States, the main party responsible for the resolution of the nuclear issue, evaluated this offer as encouraging and indicated its hope to the DPRK that the DPRK will discuss the method to this end with the IAEA.

At the recent consultation, the Agency side at first suggested its method of selecting, segregating and securing certain fuel rods.

But later both sides reached an understanding that such method cannot be accepted in principle since such method belongs,in essence, to the ad hoc inspection activities and, therefore, goes beyond the DPRK's unique NPT status.

Accordingly, the consultation focussed on the rationality of the method now being applied by the DPRK to its refuelling operation.

The DPRK side explained in detail to the Agency side that this method is the rational and reasonable method, which enables the maintenance of safeguards at the present

stage in conformity with the DPRK's unique NPT status, and which, at the same time, fully preserves the technical possibility for the Agency to select and measure certain fuel rods, as requested by the Agency, at a time when the DPRK's unique NPT status will have been lifted.

The DPRK side also provided all the conditions for enabling the Agency delegation to clearly learn the rationality of the DPRK-proposed method, by making arrangements, in the middle of the consultation, for the Agency delegation to visit the facility site and confirm the on-site condition and situation of the refuelling campaign and also to hold sufficient technical consultation with the facility operators. The Agency side noted that the DPRK's method is theoretically possible and this method has already been proven applicable through experiments, and requested a written presentation of the DPRK's method, saying that the Agency will study seriously and with goodwill the efficiency and practical guarantee of this method.

We stressed that this method would require a little more work of measurements but this is the only method we can choose in the present circumstances governed by political constraints, and assured the Agency side that we will continue with our on-going refuelling operation in such a manner as to take into consideration a number of views expressed by the Agency side with regard to this method and that we are willing to respond at any time to the Agency's proposal to hold further consultation.

The recent consultation has not produced any final agreement on the DPRK's method, but on the other hand has enabled us to further supplement and enrich this method to its perfection.

We have promptly applied this method as such to the refuelling operation, thus preserving more sufficiently the possibility of later selection and measurements of the spent fuel rods, and we have placed the whole process of the refuelling operation under strict surveillance of the Agency inspectors and of the Agency-installed surveillance equipment.

We believe that, through our consultation with the IAEA side on the refuelling campaign and through the Agency's presence at this campaign, our goodwill intention to keep our peaceful nuclear activities strictly under the Agency's control has been demonstrated to the maximum degree.

We will continue to work hard to demonstrate the transparency of our nuclear activities and to do all we can toward a final resolution of the nuclear issue through the DPRK-USA talks.
