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NOTE BY THE SECRETARY-GENERAL

The Secretary-General has the honour to transmit to the members of the Security Council the attached communication, dated 2 May 1996, which he has received from the Acting Director General of the International Atomic Energy Agency (IAEA) on behalf of the Director General, Dr. Hans Blix.



Annex

Letter dated 2 May 1996 from the Acting Director General
of the International Atomic Energy Agency addressed to
the Secretary-General

In my letter to you of 10 October 1995 (S/1995/860, annex), I referred, inter alia, to my then most recent report (GOV/2687/Add.10 of 6 March 1995) to the Agency's Board of Governors, to developments which had taken place since March 1995 over safeguards implementation in the Democratic People's Republic of Korea, to my report about that country to the thirty-ninth regular session of the General Conference of the International Atomic Energy Agency (IAEA) (GC(39)/18 of 17 August 1995) and to the action subsequently taken by the Conference and the Board of Governors meeting after the Conference. I asked you to bring the documents enclosed with my letter, and the letter itself, to the attention of the Security Council. I now enclose a copy of my most recent, written report (GOV/2687/Add.11 of 6 March 1996) to the Board. It might be helpful to you also to have the following background to and summary of key issues arising from it.

As you may recall, my letter to you of 10 October 1995 and enclosures referred, inter alia, to verification measures being implemented at nuclear facilities in the DPRK (whether or not covered by the freeze on that country's graphite-moderated reactors and related facilities foreseen in the Agreed Framework between the DPRK and the United States of America) and gave an account of the technical talks which had taken place between DPRK representatives and an Agency technical team from 12 to 18 September 1995. In that regard, I mentioned in particular that, although the DPRK had agreed to Agency measurements of irradiated fuel rods in storage at the 5 MW(e) Experimental Reactor (which would verify whether the rods were all irradiated fuel rods), it had not agreed to measurements that would give information about the total amount of plutonium in the spent fuel. This information would therefore have to be obtained, at a later date, with consequent limitations in accuracy. I pointed out that the Agency had originally envisaged taking such measurements during the transfer of the spent fuel into containers for storage and that taking them later would likely involve significant additional cost.

I said also that no agreement had been reached with the DPRK about the installation of Agency monitoring equipment at nuclear waste tanks in the DPRK's Reprocessing Plant. Such installation is required in addition to previously installed containment and surveillance equipment in order to enable the Agency to verify, on a continuous basis, that there is no movement or any operation involving these wastes. Such activities are relevant to the monitoring of the freeze, a task entrusted to IAEA upon request of the Security Council.

In my letter of 10 October I further noted that the technical talks in September 1995 had appeared to foreshadow the early implementation of other measures which, although previously agreed between representatives of the Agency and DPRK representatives, had not been applied because of objections by the operator, e.g., photographing of the new process line in the DPRK's reprocessing plant. Moreover, my letter referred to a detailed technical paper, which was

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given to the DPRK at the outset of the September talks, about the preservation of information which the Agency needs for verifying the correctness and completeness of the DPRK's initial declaration. That technical paper was not discussed at those talks; the DPRK, as I reported to you, had declared its willingness to discuss the paper only at a later date.

At the meeting of the Agency's Board of Governors on 12 December 1995, I reported developments relating to the issues identified in the preceding paragraphs. In this connection, I said that in September 1995, the Agency had asked the DPRK to undertake minor but essential modifications to the design of the storage racks for the cans to contain spent fuel discharged from its Experimental Reactor. This was to enable those cans to be sealed effectively in the racks under water. I noted that the modifications requested would not bring about any delay in the canning operations, but that in any case the timetable for those operations appeared to have slipped because of technical difficulties. I also said that notwithstanding the agreement reached with the DPRK about photographing the new process line and other areas of the Radiochemical Laboratory, this had still not been possible because of fresh objections by DPRK operators. The Agency technical paper about the preservation of information required to verify the correctness and completeness of the DPRK's initial declaration, was also on the agenda for the next technical meeting with the DPRK planned for January 1996.

You will see from my recent report to the Board of Governors (GOV/2687/Add.11) that a fourth round of technical discussions did indeed take place in Pyongyang, from 23 to 29 January 1996. Discussion resulted in limited progress in some areas. However, the DPRK continued to decline a number of important inspection measures. Thus, although the DPRK said that the Agency could now "resume ad hoc and routine inspections" (required by the safeguards agreement) these would be permitted only at facilities not subject to the freeze.

Agreement on Agency inspectors continuing baseline photographing at all facilities subject to the freeze was reconfirmed. It was also reconfirmed that the DPRK would provide, as required under the freeze, advance notice to Agency inspectors about any maintenance work involving facilities and equipment. It was further reconfirmed that short-notice inspections by inspectors already in the DPRK would continue to take place at different parts of facilities subject to the freeze as an interim measure until agreement was reached about the installation of containment and surveillance and other monitoring devices, e.g., at certain parts of the Radiochemical Laboratory. Moreover, to help obviate delays in issuing visas for Agency inspectors, it was also agreed that the Agency would provide inspector notifications two weeks in advance to enable the timely issue of visas in Vienna.

Also during the January technical talks, representatives of the Agency and the DPRK had detailed discussions about inspection activities to be carried out at specific locations. The results of those discussions are summarized in paragraph 12 of my report to the March Board meeting. Paragraphs 13 to 14 of that report cover the remaining issues addressed, in particular as relevant to the preservation of information required to verify the correctness and completeness of the DPRK's initial declaration under its Safeguards Agreement.

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Agreement could not be reached on the proposals in the Agency's paper during the January meeting. The Agency reiterated that unless there is early agreement with the DPRK on the proposed measures required to preserve the information, any possibility for the Agency to verify the correctness and completeness of the DPRK's initial declaration in the future might be lost. The fifth round of technical discussions between representatives of the Agency and the DPRK is planned for the second half of May.

I should be grateful if you would bring this letter and its enclosures to the attention of the Security Council, to which I will continue to report further developments.

(Signed) David B. WALLER
Acting Director General for
the Director General

Enclosure

**REPORT BY THE DIRECTOR GENERAL
ON THE IMPLEMENTATION OF THE AGREEMENT
BETWEEN THE INTERNATIONAL ATOMIC ENERGY AGENCY
AND THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA
FOR THE APPLICATION OF SAFEGUARDS IN CONNECTION
WITH THE TREATY ON THE NON-PROLIFERATION
OF NUCLEAR WEAPONS (INFCIRC/403)**

1. At meetings of the Board of Governors on 25 September 1995 and 12 December 1995, the Director General reported on the "Implementation of the Agreement between the Agency and the Democratic People's Republic of Korea for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons" and the Board requested the Director General to keep it informed - as appropriate - of developments in the future. This report is submitted for the Board of Governors' consideration pursuant to those requests and to bring up to date the information contained in the Director General's latest written report to the Board, document GOV/2687/Add 10.
2. At its post-General Conference meeting of the Board of Governors on 25 September 1995 the Director General reported on the third round of technical discussions that had taken place between the Agency technical team and representatives of the DPRK from 12 to 18 September 1995. The Director General explained that these discussions had related to activities carried out pursuant to the DPRK's safeguards agreement with the Agency including activities at the DPRK's nuclear facilities subject to the freeze of the DPRK's graphite moderated reactors and related facilities foreseen in the "Agreed Framework" of 21 October 1994 between the DPRK and the United States. He reported to the Board that, although the DPRK had agreed to Agency measurements of irradiated fuel rods in storage at the 5 MW(e) Experimental Reactor, which would verify whether the rods were all irradiated fuel rods, it had not agreed to measurements that would give information about the total amount of plutonium in the spent fuel. Recalling that the Agency had envisaged taking such measurements during the transfer of the spent fuel into containers for storage, the

Director General said that this information would have to be obtained through measurements, with some limitations in accuracy, at a much later date, (more than five years) and could require opening of the storage containers at significant additional cost.

3. The Director General also reported that no agreement had been reached about the installation of Agency monitoring equipment at nuclear waste tanks in the DPRK's Reprocessing Plant, needed in addition to the containment and surveillance equipment already installed, to enable the Agency to monitor, on a continuous basis, that there is no movement or any operation involving the wastes. The Director General was nevertheless able to report that some implementation measures which had been agreed in January 1995 with the DPRK but which had not been applied because of objections by the operator, (e.g. photographing of the new process line of the reprocessing plant by inspectors), could now be implemented.

4. Finally, the Director General explained to the Board that a detailed technical paper about the requirements of the Agency for the preservation of information by the DPRK which had been given to the DPRK representatives at the beginning of the September 1995 meeting, had not been discussed; the DPRK had simply indicated its intention to study the paper and to discuss it with the Agency's technical team at a future meeting. This paper describes the information that the DPRK needs to preserve and which the Agency needs in connection with the verification of the correctness and completeness of the initial DPRK declaration.

5. At the meeting of the Board of Governors on 12 December 1995, the Director General reported further about verification measures being implemented at nuclear facilities in the DPRK whether or not covered by the freeze foreseen in the 'Agreed Framework'. He said, inter alia, that in September 1995 the Agency had requested the DPRK to undertake minor but essential modifications to the design of the storage racks for cans containing spent fuel discharged from the DPRK's 5 MW(e) Experimental Reactor, so as to enable the cans to be effectively sealed in the racks under water. The Director General explained that the modifications requested would not cause any delay to the canning operations for which the entire time table appeared to have slipped because of technical difficulties related to the cleaning of the spent fuel storage pond. With regard to the agreement reached with the DPRK in September 1995 to enable Agency inspectors to photograph the new process line and other areas of the DPRK's reprocessing plant, the Radiochemical Laboratory, the Director General informed the Board that Agency inspectors had not been enabled to carry this out because DPRK operators had raised new objections and had imposed preconditions. Finally, the Director General recalled that some other technical issues, for example, the monitoring of nuclear waste also remain to be resolved. As for the paper which the Agency had given to the DPRK in September 1995, containing specific proposals about the

preservation of information required to verify the correctness and completeness of the DPRK's initial declaration, the Director General noted that DPRK representatives had not been prepared to discuss that paper in September. All these issues were on the agenda for the next technical meeting with the DPRK planned for January 1996.

6. At the conclusion of the Board of Governors meeting on 12 December 1995, the Board expressed concern that there were still some issues outstanding between the Agency and the DPRK in their technical discussions, and welcomed the further technical discussion planned for January 1996 with a view to resolving outstanding issues and expressed the hope that agreement would be reached on these issues.

DEVELOPMENTS IN SAFEGUARDS IMPLEMENTATION IN THE DPRK SINCE THE DECEMBER 1995 MEETING OF THE BOARD OF GOVERNORS.

7. The fourth round of technical discussions took place between an Agency technical team and DPRK representatives from 23 to 29 January 1996. These discussions resulted in limited progress in the form of reconfirming agreement on some of the safeguards measures, including monitoring activities, which had been agreed during previous technical meetings but which had not been implemented. Conversely, however, the DPRK continued to decline a number of important inspection measures:

8. The fundamental difference of view between the Agency and the DPRK about the current status of the DPRK's Safeguards Agreement continues. The DPRK regards acceptance of measures required by the Agency to monitor the freeze only in the context of the 'Agreed Framework' between DPRK and US and not as being in the context of implementation of the Safeguards Agreement which the DPRK considers to be inoperative at this stage.

9. During the discussions, the DPRK stated that the Agency can now "resume ad-hoc and routine inspections" (required by the safeguards agreement). However, such inspections would be permitted only at facilities not subject to the freeze. In conformity with this statement, the DPRK agreed to provide to the Agency, by the end of February 1996, accounting reports pertaining to the nuclear material at the DPRK's IRT Research Reactor, the Critical Assembly, the Sub-Critical Assembly and the Nuclear Fuel Rod Storage facility, small facilities not subject to the freeze. Moreover, the DPRK agreed to send the Agency an updated list of Locations Outside Facilities (LOFs) and to send relevant accounting reports, as required, also by the end of February 1996. It also was agreed that Agency inspections at the LOFs would start in March 1996. However, the DPRK declined to provide reports pertaining to nuclear material at facilities subject to the freeze.

10. Agreement on Agency inspectors continuing baseline photographing at all facilities subject to the freeze was reconfirmed. Such activities were agreed during the September 1995 technical meeting, but, as stated in paragraph 5 above, have not been implemented because DPRK operators had raised new objections and imposed preconditions. The activities will now be implemented in accordance with written procedures endorsed during the technical discussions. It was also reconfirmed that the DPRK will provide, as required under the freeze, advance notice to the Agency inspectors about any maintenance work involving facility equipment.

11. During the January technical discussions it was further reconfirmed that short notice inspections by inspectors already in DPRK will continue to take place at different parts of facilities subject to the freeze. This is an interim measure until agreement is reached with the DPRK about the installation of containment and surveillance and other monitoring devices e.g., at certain parts of the Radiochemical Laboratory. In view of delays which have been experienced in issuing visas for Agency inspectors it was also agreed that the Agency will provide inspection notifications two weeks in advance to enable the timely issuance of visas in Vienna.

12. In addition to the issues described above, the Agency had detailed discussions with the DPRK about inspection activities to be carried out at specific locations as follows:

- (i) The DPRK reconfirmed the agreement which had been reached during the previous meeting with the Agency about measurements of irradiated fuel rods located in the spent fuel pond at the 5 MWe Experimental Reactor. These measurements would be made during the canning of the fuel rods now scheduled to take place between March and July 1996. However, the measurements, (a procedure for which was given to the DPRK representatives by the Agency during the discussions), will be limited and will not provide any information about the total amount of plutonium contained in the irradiated fuel. On this particular issue, the DPRK reiterated that it is not prepared now to provide operating records and plutonium production records regarding the 5 MWe Experimental Reactor for examination by the Agency. During talks related to the fuel rods, and the Agency's request to the DPRK to undertake the required modifications to the storage rack design, the DPRK requested the Agency to confirm the modifications it had suggested to the fuel rack design with the United States canning team and the DPRK operator. This would enable the DPRK operator to "assess these proposals from a safety, operational and monitoring point of view". Most of the

modifications required to the design have, by the date of this report, already been implemented.

- (ii) Following an *in situ* demonstration of relevant equipment by the Agency, the DPRK reconfirmed its agreement to the installation of an Integral Monitoring System, consisting of vibration and magnetic sensors, on the motors of the mixer settlers in the solvent recovery area of the Radiochemical Laboratory. Such sensors, would give the Agency inspectors the capability to detect on a continuous basis, whether there is any operation of the mixer settlers and also the length of any maintenance work involving the motors. It was expected that installation could start in March 1996 and that, after one month's performance evaluation and subsequent discussions with the operator, the installation of the system will continue on mixer settlers in other parts of the facility.
- (iii) The DPRK continued to refuse the Agency's request for the installation of electromanometers at the liquid waste tanks of the Radiochemical Laboratory. This equipment, with the previously installed containment and surveillance equipment, would enable the Agency effectively to monitor the freeze related to such waste by verifying, on a continuous basis, that there is no movement or any operation involving the liquid nuclear waste. This is important also in connection with the preservation of information related to the verification of the completeness and correctness of the DPRK's initial declaration. In the Agency's view, there are no technical barriers to the installation of the electromanometers. Furthermore, there is still no agreement with the DPRK about the Agency's request to perform non-destructive measurements and/or sampling for destructive analysis at locations selected by the Agency at the Radiochemical Laboratory.
- (iv) During the technical discussions in January 1996, it was not possible to resolve definitively whether nuclear-related equipment and components for the Nyongbyon Nuclear Power Plant (50 MWe) and the Taechon Nuclear Power Plant (200 MWe) is to be submitted by the DPRK for Agency monitoring of the freeze.

13. Agreement could not be reached on the proposals in the Agency's paper, given to the DPRK in September 1995, about the preservation of information required to verify the correctness and completeness of the DPRK's initial declaration under its safeguards agreement, nor about the timing of the next technical meeting at which that paper could be

discussed further. The Agency team put forward practical proposals for the early implementation of the measures contained in the paper. The DPRK side made only a general statement according to which "there can be many discussions on this issue in the future". The Agency reiterated that unless there is an early agreement with the DPRK on the measures required to preserve the information, any possibility for the Agency to verify in the future the correctness and completeness of the DPRK initial declaration, might be lost.

14. There is still no agreement about measures to improve current communication procedures between the Agency and the DPRK which could facilitate Agency implementation of inspection and monitoring activities. Neither, did the DPRK agree to discuss issues related to increased operating costs at facilities subject to the freeze and to DPRK requirements for the Agency to provide its own power supply for the operation of installed Agency safeguards and monitoring equipment.

15. To follow up the technical discussions in January 1996, the Agency, under cover of a letter dated 14 February 1996 to the General Department of Atomic Energy, sent to the DPRK a summary of the discussions. The substance of the summary is reflected in this report. Finally, the Agency maintains the continuous presence of two inspectors in the Nyongbyon area resulting in high costs of operations. This will increase further since three inspectors will be used during the time of the canning operations regarding the spent fuel rods.
