

Board of Governors

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Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran

Report by the Director General

1. On 19 November 2008, the Director General reported to the Board of Governors on the implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran (Iran) (GOV/2008/59). This report covers relevant developments since that date.

A. Current Enrichment Related Activities

2. Since the Director General's previous report, Iran has continued to feed UF₆ into the 3000-machine IR-1 unit (Unit A24), and six cascades of Unit A26, at the Fuel Enrichment Plant (FEP).¹ Nine other cascades of Unit A26 have been installed and are under vacuum.² Installation of the three remaining cascades of that Unit is continuing. Installation work at Units A25, A27 and A28, including the installation of pipes and cables, is also continuing.

3. The Agency has finalized its assessment of the results of the physical inventory verification (PIV) carried out at FEP on 24–26 November 2008, and has concluded that the physical inventory as declared by Iran was consistent with the results of the PIV, within the measurement uncertainties normally associated with enrichment plants of a similar throughput. The Agency has verified that, as

¹ For more detail on the configuration of FEP, see GOV/2008/38, para. 2.

² On 1 February 2009, 3936 centrifuges were being fed with UF₆; 1476 centrifuges were installed and under vacuum, and an additional 125 centrifuges were installed but not under vacuum.

of 17 November 2008, 9956 kg of UF₆ had been fed into the cascades since February 2007, and a total of 839 kg of low enriched UF₆ had been produced. The results also showed that the enrichment level of this low enriched UF₆ product verified by the Agency was 3.49% U-235. Iran has estimated that, between 18 November 2008 and 31 January 2009, it produced an additional 171 kg of low enriched UF₆. The nuclear material at FEP (including the feed, product and tails), as well as all installed cascades, remain under Agency containment and surveillance.³

4. On 29 September 2008, the Agency conducted a PIV at the Pilot Fuel Enrichment Plant (PFEP), the results of which confirm the physical inventory as declared by Iran, within the measurement uncertainties normally associated with such a facility. Between 29 October 2008 and 15 January 2009, Iran fed a total of approximately 50 kg of UF₆ into the 20-machine IR-1 cascade, the 10-machine IR-2 cascade and the single IR-1, IR-2 and IR-3 centrifuges. The nuclear material at PFEP, as well as the cascade area, remains under Agency containment and surveillance.³ Iran has transferred a few kilograms of low enriched UF₆ produced at PFEP to the Jabr Ibn Hayan Multipurpose Laboratories⁴ at the Tehran Nuclear Research Centre for research and development purposes.

5. To date, the results of the environmental samples taken at FEP and PFEP⁵ indicate that the plants have been operating as declared (i.e. less than 5.0% U-235 enrichment). Since March 2007, 21 unannounced inspections have been conducted at FEP.

6. On 12 January 2009, Iran provided updated Design Information Questionnaires (DIQs) for FEP and PFEP. Iran informed the Agency in the DIQ for FEP that it plans to include a room for functional testing of single centrifuge machines. There were no other changes in the capacity of the facilities or of their schedules for operation.

B. Reprocessing Activities

7. The Agency has continued to monitor the use and construction of hot cells at the Tehran Research Reactor (TRR) and the Molybdenum, Iodine and Xenon Radioisotope Production (MIX) Facility. There have been no indications of ongoing reprocessing related activities at those facilities. While Iran has stated that there have been no reprocessing related R&D activities in Iran, the Agency can confirm this only with respect to these two facilities, as the measures of the Additional Protocol are not available.

C. Heavy Water Reactor Related Projects

8. The Agency last visited the Iran Nuclear Research Reactor (IR-40) in August 2008 (GOV/2008/59, para. 9). On 21 January 2009, the Agency again requested access to carry out a DIV at

³ In line with normal safeguards practice, small amounts of nuclear material at the facility, e.g. some waste and samples, are not under containment and surveillance.

⁴ GOV/2003/40, paras 7 and 18; GOV/2004/83, paras 14 and 73–74.

⁵ Results are available for samples taken up to 22 November 2008 for FEP and up to 20 April 2008 for PFEP. These results have shown particles of low enriched uranium (with up to 4.2% U-235), natural uranium and depleted uranium (down to 0.4% U-235 enrichment).

the IR-40. In a letter dated 26 January 2009 referring to previous communications concerning the submission of design information, Iran informed the Agency that it would not permit the Agency to carry out the DIV. In a reply dated 29 January 2009, the Agency reiterated its request for access to carry out the DIV. In its response, dated 7 February 2009, Iran reiterated its view that since IR-40 was not in a situation to receive nuclear material, no DIQ was required, and, hence, the request for access to perform DIV was not justified. Iran requested that, as long as the decision stipulated in Iran's letter of 29 March 2007 was valid,⁶ no DIV for IR-40 be scheduled.

9. Iran's refusal to grant the Agency access to IR-40 could adversely impact the Agency's ability to carry out effective safeguards at that facility, and has made it difficult for the Agency to report further on the construction of the reactor, as requested by the Security Council. In addition to the roofing having already been completed for the other buildings on the site, construction of the reactor building's domed containment structure has also been completed, as observed in images taken on 30 December 2008, rendering impossible the continued use of satellite imagery to monitor further construction inside the reactor building or any of the other buildings.

10. On 7 February 2009, the Agency conducted an inspection at the Fuel Manufacturing Plant, at which time it was noted that the process line for the production of natural uranium pellets for the heavy water reactor fuel had been completed and fuel rods were being produced.

11. Using satellite imagery, the Agency has continued to monitor the status of the Heavy Water Production Plant, which appears to be in operational condition.

D. Other Implementation Issues

D.1. Uranium Conversion

12. As of 9 February 2009, approximately 42 tonnes of uranium in the form of UF₆ had been produced at the Uranium Conversion Facility (UCF) since 8 March 2008, the date of the last PIV carried out by the Agency at UCF. This brings the total amount of uranium in the form of UF₆ produced at UCF since March 2004 to 357 tonnes, some of which was transferred to FEP and PFEP, and all of which remains under Agency containment and surveillance.

D.2. Design Information

13. As previously reported to the Board of Governors, the Agency has still not received preliminary design information, requested by the Agency in December 2007, on the nuclear power plant that is to be built in Darkhovin (GOV/2008/38, para. 11).

D.3. Other Matters

14. A PIV was carried out at the Bushehr Nuclear Power Plant (BNPP) on 13–14 December 2008. The fuel assemblies imported from the Russian Federation for use at BNPP remain under Agency seal. Iran has informed the Agency that the loading of fuel into the reactor is scheduled to take place during the second quarter of 2009.

⁶ GOV/2007/22, paras 12–14; GOV/2007/48, para. 19.

E. Possible Military Dimensions

15. As detailed in the Director General's previous reports to the Board (most recently in GOV/2008/59, para. 15), there remain a number of outstanding issues which give rise to concerns, and which need to be clarified, to exclude the existence of possible military dimensions to Iran's nuclear programme. As indicated in those reports, for the Agency to be able to address these concerns and make progress in its efforts to provide assurance about the absence of undeclared nuclear material and activities in Iran, it is essential that Iran, inter alia, provide the information and access requested by the Agency.

16. In a letter to Iran dated 2 February 2008, the Agency reiterated its request to meet with Iranian authorities, in Tehran, at the earliest possible opportunity, with a view to proceeding with the resolution of the issues that remain outstanding.

17. The Agency has still not received a positive reply from Iran in connection with the Agency's requests and, therefore, has not had access to relevant information, documentation, locations or individuals.

F. Summary

18. The Agency has been able to continue to verify the non-diversion of declared nuclear material in Iran. However, Iran has not implemented the modified text of its Subsidiary Arrangements General Part, Code 3.1, on the early provision of design information and has continued to refuse to permit the Agency to carry out design information verification at IR-40.

19. Contrary to the request of the Board of Governors and the Security Council, Iran has not implemented the Additional Protocol, which is a prerequisite for the Agency to provide credible assurance about the absence of undeclared nuclear material and activities. Nor has it agreed to the Agency's request that Iran provide, as a transparency measure, access to additional locations related, inter alia, to the manufacturing of centrifuges, R&D on uranium enrichment, and uranium mining and milling, as also required by the Security Council.

20. Regrettably, as a result of the continued lack of cooperation by Iran in connection with the remaining issues which give rise to concerns about possible military dimensions of Iran's nuclear programme, the Agency has not made any substantive progress on these issues. As indicated in previous reports of the Director General, for the Agency to make such progress, Iran needs to provide substantive information, and access to relevant documentation, locations and individuals, in connection with all of the outstanding issues. With respect to the alleged studies in particular, an important first step is for Iran to clarify the extent to which information contained in the documentation which Iran was shown, and given the opportunity to study, is factually correct and where, in its view, such information may have been modified or relates to non-nuclear purposes.

21. Unless Iran implements the above transparency measures and the Additional Protocol, as required by the Security Council, the Agency will not be in a position to provide credible assurance about the absence of undeclared nuclear material and activities in Iran. The Director General continues to urge Iran to implement all measures required to build confidence in the exclusively peaceful nature of its nuclear programme at the earliest possible date. The Director General, at the same time, urges Member States which have provided such documentation to the Agency to agree to the Agency's providing copies thereof to Iran.

22. Contrary to the decisions of the Security Council, Iran has not suspended its enrichment related activities or its work on heavy water-related projects, including the construction of the heavy water moderated research reactor, IR-40, and the production of fuel for that reactor.

23. The Director General will continue to report as appropriate.