

Board of Governors

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(GOV/2009/33)

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 February 2009, 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/2009/8). 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 Unit A24, and twelve cascades of Unit A26, at the Fuel Enrichment Plant (FEP).¹ The six other cascades of Unit A26 have been installed and are under vacuum. Iran has also started installation of cascades at Unit A28; seven cascades have been installed and are under vacuum, and installation of another cascade is continuing. Installation work at Units A25 and A27 is also continuing.²

3. Iran has estimated that, between 18 November 2008 and 31 May 2009, 5723 kg of UF₆ was fed into the cascades and a total of 500 kg of low enriched UF₆ was produced.³ The nuclear material at

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

² On 31 May 2009, 4920 centrifuges were being fed with UF₆; 2132 centrifuges were installed and under vacuum, and an additional 169 centrifuges were installed but not under vacuum.

³ The Agency has verified that, as of 17 November 2008, 9956 kg of UF₆ had been fed into the cascades and 839 kg of low enriched UF₆ had been produced since the beginning of operations in February 2007 (GOV/2009/8, para. 3).

FEP (including the feed, product and tails), as well as all installed cascades, remain under Agency containment and surveillance.⁴ Since the last physical inventory verification (PIV), the Agency and Iran have continued to discuss improvements in the facility's accountancy system. In addition, the Agency has informed Iran that, given the increasing number of cascades being installed at FEP and the increased rate of production of LEU at the facility, improvements to the containment and surveillance measures at FEP are required in order for the Agency to continue to fully meet its safeguards objectives. The Agency has proposed a solution and initiated discussions with Iran to that end.

4. Between 15 January 2009 and 23 May 2009, a total of approximately 54 kg of UF₆ was fed into the 10-machine IR-3 cascade, the 10-machine IR-2 cascade and single IR-1, IR-2, IR-2 modified, IR-3 and IR-4 centrifuges at the Pilot Fuel Enrichment Plant (PFEP). The nuclear material at PFEP, as well as the cascade area, remains under Agency containment and surveillance.⁴

5. To date, the results of the environmental samples taken at FEP and PFEP indicate that the plants have been operating as declared (i.e. less than 5.0% U-235 enrichment).⁵ Since March 2007, 26 unannounced inspections have been conducted at FEP. Twenty-five of these inspections were successfully implemented. For one inspection, carried out on 19 May 2009, access to the facility was not granted by Iran within the agreed time because of an ongoing security drill being carried out at the facility by Iran which had been notified in advance to the Agency. The Agency has initiated discussions with Iran on arrangements in connection with unannounced inspections that would allow the Agency to meet its safeguards objectives within the required timeframe under similar circumstances.

B. Reprocessing Activities

6. 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

7. The Agency last visited the Iran Nuclear Research Reactor (IR-40) in August 2008 (GOV/2008/59, para. 9). On 22 April 2009, the Agency again requested access to carry out design information verification (DIV) at the IR-40. In a letter dated 3 May 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.

⁴ 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.

⁵ Results are available for samples taken up to 1 February 2009 for FEP and up to 20 April 2008 for PFEP. These results have shown particles of low enriched uranium (with up to 4.4% U-235), natural uranium and depleted uranium (down to 0.4% U-235 enrichment).

8. 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. The completion of the containment structure over the reactor building, and the roofing for the other buildings on the site, makes it impossible to assess further progress on construction inside the buildings without access to the facility. However, satellite imagery suggests that construction is continuing at the reactor site.

9. On 23 May 2009, the Agency conducted an inspection at the Fuel Manufacturing Plant, at which time it was noted that, with the exception of the final quality control testing area, the process line for the production of fuel assemblies for the heavy water reactor fuel had been completed, and that one fuel assembly had been assembled from previously produced fuel rods.

10. Using satellite imagery, the Agency has continued to monitor the status of the Heavy Water Production Plant, which appears to have been operating intermittently since the last report.

D. Other Implementation Issues

D.1. Uranium Conversion

11. Between 8 and 12 March 2009, the Agency conducted a PIV at the Uranium Conversion Facility. During the PIV, Iran presented 345 tonnes of uranium in the form of UF₆ for Agency verification. The Agency is evaluating the results of the PIV.

D.2. Design Information

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

13. Iran has not yet implemented the revised Code 3.1 of the Subsidiary Arrangements General Part (GOV/2008/59, para. 9; GOV/2007/22, paras 12–14). Iran is the only State with significant nuclear activities which has a comprehensive safeguards agreement in force but is not implementing the provisions of the revised Code 3.1 on the early provision of design information. The absence of such information results in late notification to the Agency of the construction of new facilities and changes to the design of existing facilities.

D.3. Other Matters

14. On 1 November 2008, Iran transferred a few kilograms of low enriched UF₆ from PFEP to the Jabr Ibn Hayan Multipurpose Laboratories at the Tehran Nuclear Research Centre.⁶ In a letter dated 1 June 2009, Iran clarified that the material will be used in conversion experiments for the manufacturing of UO₂ targets to be irradiated in the Tehran Research Reactor for the production of radioisotopes for medical applications.

15. Iran has informed the Agency that the loading of fuel into the Bushehr Nuclear Power Plant is now scheduled to take place in September/October 2009.

⁶ GOV/2009/8, para. 4.

16. Using satellite imagery, the Agency has observed a continuation of ore recovery activities in the area of the Bandar Abbas Uranium Production Plant (UPP) and at the Saghand uranium mine. New construction and modifications to buildings and process plant have also been observed at UPP, the Saghand uranium mine and the Ardakan Yellow Cake Production Plant, although it is difficult to assess the operational status and degree of utilization of these plants.

E. Possible Military Dimensions

17. As detailed in the Director General's previous reports to the Board (most recently in GOV/2009/8, 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, implement the Additional Protocol and provide the information and access requested by the Agency. The Agency has still not received a positive reply from Iran in connection with the Agency's requests for access to relevant information, documentation, locations or individuals.

18. In a letter to Iran dated 29 May 2009, the Agency responded to Iran's letters dated 16 September 2008, 28 November 2008 and 2 March 2009, in which Iran had, inter alia, provided its views on a number of issues referred to in the Director General's reports and questioned the correctness of certain statements contained in the reports attributed to Iran in connection with possible military dimensions to Iran's nuclear programme and statements in relation to the resolution of the issues contained in the Work Plan. In its letter, the Agency explained why the statements in the Director General's reports were correct. The Agency also reiterated its request to meet with relevant Iranian authorities at the earliest possible opportunity, with a view to addressing in a substantive and comprehensive manner the issues that remain outstanding.⁷

F. Summary

19. As has been reported in previous reports, the Agency continues to verify the non-diversion of declared nuclear material in Iran.

20. Iran has not, however, 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.

21. Iran has not suspended its enrichment related activities or its work on heavy water related projects as required by the Security Council.

22. Contrary to the request of the Board of Governors and the requirements of the Security Council, Iran has neither implemented the Additional Protocol nor cooperated with the Agency in connection with the remaining issues which give rise to concerns and which need to be clarified to exclude the possibility of military dimensions to Iran's nuclear programme. Unless Iran implements the Additional Protocol and clarifies the outstanding issues, the Agency will not be in a position to provide credible assurance about the absence of undeclared nuclear material and activities in Iran.

⁷ GOV/2009/8, paras 15, 20; GOV/2008/59, paras 15, 19.

23. The Agency believes that it has provided Iran with sufficient access to documentation in its possession to permit Iran to respond substantively to the questions raised by the Agency. However, the Director General urges Member States which have provided documentation to the Agency to work out new modalities with the Agency so that it could share further information with Iran since the Agency's inability to share additional information with Iran, and to provide copies or, if possible, originals, is making it difficult for the Agency to progress further in its verification.

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