IAEA Visits Turquz-Abad: Too Little, Too Late?

The IAEA Has Many More Sites to Inspect Associated with the Iranian Nuclear Archive

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On April 4, Reuters reported that the International Atomic Energy Agency (IAEA) visited a warehouse in Iran in the Turquz Abad district, identified by Israel in September 2018 as secretly holding nuclear-related equipment and nuclear material. Unfortunately, the visits reportedly occurred in March 2019, long after Iran began emptying the site from July to September 2018, activity that we documented using commercially-available satellite imagery. Prime Minister Benjamin Netanyahu only publicly identified the site during a speech at the United Nations in September after the IAEA had failed to act on this information, which Israel had quietly provided to it, and the site was nearly emptied of its contents. Iran began a process of emptying the site following soon after a separate disclosure by Israel in April 2018 that it had seized documents and materials from another site in Tehran, which comprised a “Nuclear Archive” of Iran’s past nuclear weapons efforts. In short, the IAEA visits in March 2019 are like looking for a horse when the barn door has been left open for many months.

One success after failing to inspect for many months could be if the IAEA took environmental samples at the warehouse and is able to detect evidence of nuclear material. However, the IAEA’s detection of uranium particles at the Parchin site in 2015 was never followed up on and provides a poor precedent for any detection at the warehouse site. Moreover, all visible shipping containers originally present at the open-air site had been removed by late September, and Iran has had roughly half a year to sanitize it. IAEA Director General Yukiya Amano should explain why he refused to mount an inspection last summer when the site was still "live" and Iran was moving containers off-site.

Broader Problem of a Failure to Act

The Turquz Abad debacle is only one symptom of an IAEA hesitancy to act on information pertinent to ensuring the absence of undeclared nuclear materials and activities in Iran, as is its mandate. Since the revelation of the Iranian Nuclear Archive has come to light, we have assessed tranches of documents in an ongoing series of reports, which have offered rich detail of Iran’s past nuclear weapons activities that were previously unknown to the IAEA or that Iran had clearly lied about. We were also able to establish from the archive that Iran undertook to re-orient its nuclear weapons program in 2003, then known as the Amad Plan, hiding work on overtly military nuclear applications, and storing others with plausible civilian justifications at
research institutions. Some examples of sites and people that warrant visits by the IAEA as a result of the archive include the following:

1) *A range of studies and minutes of meetings which identify specific people, many still active today in positions of authority or in governmental entities.* The IAEA should ask to meet these people and find out about their roles in these nuclear weapons activities, according to documents that list their names as either authors or participants in meetings discussing nuclear weapons. This effort should include asking to interview (a) people at meetings planning and carrying out the Amad Plan; and (b) people who are listed in meeting minutes as participating in meetings involved in reorienting the Amad Plan to continue activities related to nuclear weapons development.

2) **Shahid Boroujerdi project sites, equipment, and people.** The Nuclear Archive shows that this site was being built to make highly enriched uranium (HEU) metal and fabricate the HEU metal into components of nuclear weapon cores. This would not be the most critical inspection for the IAEA since it never operated, but a visit would determine that nothing nuclear-related is going on at the site today, and in a figurative sense, establish the basis to inspect military sites associated with potential nuclear weapons-related work. In terms of technical substance and investigating potential on-going activities, interviews with past personnel would be a high priority.

3) **Parchin site.** The IAEA should inspect the main building that previously contained a large high explosive chamber and the building north of main one that had once housed a high explosive test chamber and a flash x ray machine. It should sample throughout the site and ask to see equipment, particularly the flash x ray machine, which is relevant to Iran’s safeguards agreement and Section T of the Joint Comprehensive Plan of Action (JCPOA). Information from the Nuclear Archive shows that the chambers were being used to test a uranium deuteride neutron initiator and conduct other compression tests that used uranium, related to developing nuclear weapons.

4) **The Marivan site.** At this site, Iran conducted testing that was related to the development of implosion nuclear weapons. An inspection should include asking to see fast-acting diagnostic equipment that is relevant to both Iran’s safeguards agreement and Section T.

5) **A range of buildings, people, and equipment, all identified in the archive.** These are associated with (a) the development of the means to produce uranium and highly enriched uranium metal and then fabricate these metals into nuclear weapon components; and (b) the development of a multi-point initiation system for a nuclear weapon, called the “Shock Generator” in the archive, which is a sophisticated device that sets off, near simultaneously, the main charge of high explosives in a nuclear weapon that then compresses the nuclear core.

6) **Activities associated with the design, selection, and construction of a nuclear test site** for a ten-kiloton nuclear device and the development of an ability to accurately predict the yield of a nuclear detonation, known as Project Midan.
7) Sites and people relevant to SPND. Iran **allegedly continues** its nuclear weapons related activities in a more covert, dispersed fashion under the organization name SPND, as far as can be determined from publicly reported information and that derived from the archive.

This list is just a sample of the sites and personnel mentioned in the archive. The goal of IAEA inspections involving the archive material should be to answer whether nuclear weapon-related R&D is ongoing in Iran. Iran has consistently lied and stated that it never pursued any nuclear weapons work, and that it always had an entirely peaceful nuclear program. Yet, the archive establishes through documentation, photos of people and equipment, minutes of meetings, charts, and many other materials, that reality is just the opposite. The IAEA should provide assurances, with the level of confidence that only the IAEA has provided in other cases, that this is not the case.

Turquz Abad ultimately must be looked at as a failure by the IAEA to act promptly, but it can still salvage its mission in Iran and provide assurances or other conclusions following the disclosure of the Nuclear Archive information. After all, its basic mandate is to verify Iran’s safeguards agreement as a Nuclear Non-Proliferation Treaty member state. So far, it still remains far from determining that Iran’s nuclear program is peaceful.