The Atomic Energy Organization of Iran: What Role?

By Paul Kerr

Iran’s persistent expansion of its uranium-enrichment program and its covert construction of an underground gas-centrifuge enrichment facility at Fordow have contributed to concerns that Tehran harbors nuclear weapons ambitions. Arrangements for constraining Iran’s ability to use its declared enrichment facilities for nuclear weapons programs are a particularly controversial element in the ongoing multilateral negotiations over Iran’s nuclear program.

Much of the discussion about Iran’s potential production of highly enriched uranium (HEU) for use in nuclear weapons has focused on its three previously secret enrichment facilities that now are under International Atomic Energy Agency (IAEA) safeguards. The concern is that Iran could use these facilities to produce HEU, perhaps after withdrawing them from safeguards.

Such concerns are understandable, but it is worth examining evidence from official and authoritative, unofficial Iranian and U.S. sources about the Atomic Energy Organization of Iran (AEOI), the entity that controls Iran’s enrichment program, including the Fordow facility and two other centrifuge facilities—a commercial plant and a pilot plant—located at the Natanz nuclear site. This evidence suggests that the AEOI is motivated, at least in part, by a desire to demonstrate its technical prowess via the enrichment program. Moreover, according to the evidence, AEOI nuclear activities appear to be exclusively peaceful, an observation consistent with U.S. intelligence assessments in 2007 and afterward that Iran had halted its nuclear weapons program in late 2003. If accurate, the evidence described in this article indicates that Iran’s declared facilities are not part of a plan to produce nuclear weapons. It is considerably more likely that Iran would attempt to develop nuclear weapons using covert undeclared facilities.

Nevertheless, although observers understandably suspect that Iran may possess undeclared nuclear sites, there is no public official evidence that Iran has enrichment-related facilities other than those operated by the AEOI. Furthermore, clandestine facilities could not easily substitute for Iran’s declared nuclear program as a source of material for a potential nuclear arsenal. It would be no simple feat for Iran to conceal an entire covert nuclear weapons program—a fact demonstrated by Tehran’s past failure to keep its secret nuclear activities hidden.[1] For these reasons, a discussion of the AEOI’s role is germane to the larger debate over Iran’s nuclear program.

The AEOI

The AEOI is a powerful bureaucratic actor that has not only undertaken controversial nuclear activities, but also influenced Tehran’s diplomatic efforts to persuade the international community that its nuclear program is exclusively peaceful.

The International Atomic Energy Agency (IAEA), which has applied safeguards on the Iranian nuclear program since 1974, began investigating the program in 2002. The IAEA subsequently reported on various nuclear activities, some of which were related to uranium enrichment, that Tehran had failed to disclose to the agency. Pursuant to agreements with France, Germany, and the United Kingdom (known collectively as the EU3), Iran suspended its enrichment program from the fall of 2003 to the summer of 2005.[2] Starting in 2007, the UN Security Council adopted a series of resolutions that
imposed sanctions on Iran. Tehran’s persistent efforts to continue and expand the program continue to generate fears that Iran is trying at least to develop the ability to produce a nuclear weapon.[3] The unresolved IAEA investigation, some of which concerns Iranian activities possibly related to nuclear weapons development, has contributed to such fears.

Established in 1974, the AEOI initiated a number of activities related to nuclear power over a short period of time.[4] After the 1979 revolution, Iran’s nuclear program was controlled by the Ministry of Energy, but the AEOI was split off from that ministry soon thereafter.[5] The AEOI currently operates Iran’s declared enrichment program and has a variety of peaceful programs in areas such as agriculture, medicine, and basic nuclear research and development.[6]

A Powerful Bureaucratic Actor

The AEOI has played a crucial role in Iran’s past diplomatic efforts concerning its nuclear program. The AEOI was in charge of such efforts until after an IAEA Board of Governors meeting in June 2003,[7] during which the board first expressed “concern” about Iran’s past undeclared nuclear activities and urged Tehran to cooperate with the IAEA investigation.[8]

Subsequently, Iran formed a committee within its Supreme National Security Council to coordinate the government’s nuclear diplomacy.[9] This committee included various ministers, including the head of the AEOI. Hassan Rouhani, Iran’s recently elected president who formerly headed the negotiations concerning the nuclear program, stated during a July 2005 interview that the committee played a role in Tehran’s refusal to end its enrichment program. The committee decided that “the nuclear fuel cycle was our red line and under no circumstances would we waive it,” he explained.[10] Rouhani later revealed in a May 2012 interview that the AEOI had “wanted to end the suspension” of Iran’s enrichment program.[11]

The AEOI remains an important bureaucratic player, apparently leading Iran’s interactions with the IAEA regarding the agency’s investigation.[12] In addition, AEOI experts participate in multilateral negotiations concerning Iran’s nuclear program.[13]

A Peaceful Entity

The AEOI has understandably been the subject of suspicions regarding its possible role in an Iranian nuclear weapons program. The organization undertook some of the nuclear activities revealed by the IAEA investigation, such as secret enrichment experiments. The AEOI is subject to sanctions imposed by the UN Security Council, the U.S. government, and the European Union that are designed to restrict Iran’s ability to develop a nuclear weapons capability and induce the government to comply with the Security Council resolutions.

Nevertheless, there are several indications that AEOI activities are not part of a nuclear weapons program. First, a 2011 IAEA description of the management structure of Iran’s suspected past nuclear weapons program does not include the AEOI.[14] Second, the U.S. intelligence community appears to believe that AEOI nuclear activities are peaceful. For example, a 2007 National Intelligence Estimate (NIE), which judged that Iran had had a nuclear weapons program but halted it in late 2003, appeared to exclude the AEOI-run enrichment program. The NIE defined the weapons activities as “nuclear weapon design and weaponization work and covert uranium conversion-related and uranium enrichment-related work.”[15]

Moreover, the U.S. intelligence assessment of Iran’s underground enrichment facility at Fordow, the existence of which was made public by France, the UK, and the United States in September 2009, appears to illustrate the AEOI’s peaceful role. The covert nature of that facility and its location on a military base have fed suspicions that the facility was part of a secret Iranian nuclear weapons program. U.S. intelligence community talking points from September 2009 indicated otherwise, stating that the facility’s existence did “not contradict” conclusions of the 2007 NIE regarding Iran’s
nuclear weapons program. Part of the reason for this judgment, the talking points suggest, was that the Fordow facility was developed by the AEOI, its presence on a military base notwithstanding.

**A Forceful Advocate**

Iran’s expansion of its enrichment program could be a product of bureaucratic aggrandizement rather than an effort to develop a nuclear weapon. The AEOI appears to have been a persistent and effective advocate of expanding the program. In his 2012 book, Seyed Hossein Mousavian, who was Iran’s spokesman during the government’s 2003-2005 negotiations with the EU3, portrayed the AEOI as an entity focused on its technical progress. According to his account, some Iranian Foreign Ministry officials “had been worried” that AEOI officials who “had previously taken the lead in handling” Tehran’s nuclear discussions with the IAEA had been “overly optimistic and failed to predict the emergence of the nuclear crisis because of their focus on straightforward technical matters.” Mousavian is not a neutral observer, but Rouhani appeared to reinforce this point in the May 2012 interview, revealing that the AEOI advocated terminating Iran’s suspension of its enrichment program in order to silence skeptics within the government of the organization’s ability to execute the plans for the program.

Perhaps significantly, the AEOI appears to have had considerable freedom of action. Rouhani, who then was secretary of the Supreme National Security Council, explained in a 2004 speech that the government had granted the AEOI additional autonomy sometime between 1999 and 2000. That move allowed it “to become more active, without being forced to go through bureaucratic and regulatory labyrinths,” Rouhani said. He appeared to suggest that, as a consequence of these changes, the AEOI undertook the pre-2003 secret enrichment activities on its own initiative. For obvious reasons, the secret nature of these activities caused concern, but they may have been the result of AEOI freelancing rather than a nuclear weapons program.

**Conclusion**

Iran’s declared, AEOI-run enrichment facilities have an inherent nuclear weapons-related potential. Concerns about those facilities are likely to persist; determining the best way to address these concerns is beyond the scope of this article. There is legitimate trepidation regarding Iran’s potential nuclear weapons ambitions.

Yet, some observers’ concerns about Iran’s declared nuclear facilities may be overblown. “Who runs what” matters in Iran, and the current bureaucratic structure of the country’s nuclear program supports the U.S. intelligence community’s conclusion that Iran does not currently have a nuclear weapons program. The evidence described above indicates that the AEOI is an influential organization pursuing a peaceful nuclear program. Concerns about possible Iranian activities related to nuclear weapons are understandable, but those activities appear to have been halted and were not pursued by the AEOI. Although a great deal of public discussion about Iran concerns Tehran’s potential to produce weapons-grade enriched uranium using its AEOI-controlled facilities, Iran would likely use covert facilities to produce a nuclear weapon.

The AEOI is not above reproach. The organization was involved in undeclared nuclear activities of concern and could be connected with Tehran’s past nuclear weapons program. Nevertheless, Tehran’s determination to maintain at least part of its enrichment program may not indicate an intention to develop nuclear weapons. Observers and policymakers concerned about a future Iranian nuclear weapons program would do well to focus on Iranian entities other than the AEOI.

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research for this article was conducted while he was a visiting fellow at the Vienna Center for Disarmament and Nonproliferation. The views expressed in this article are those of the author and do not necessarily reflect those of the Congressional Research Service.

ENDNOTES

1. International Institute for Strategic Studies, Iran’s Strategic Weapons Programmes: A Net Assessment (Abingdon, Oxon, UK: Routledge, 2005).

2. Iran concluded these agreements in October 2003 and November 2004.


5. “If We Want Nuclear Energy, We Should Not Make a Fuss,” Sharq, September 7, 2013 (interview with Reza Amrollahi, former head of the Atomic Energy Organization of Iran [AEOI]).


7. In a 2004 speech, Hassan Rouhani identified the AEOI as “the authority that was basically handling all political and technical issues concerning this case” until after the IAEA Board of Governors meeting in June 2003. The AEOI “used to appoint the Islamic Republic of Iran’s representative to Vienna to deal with the IAEA,” he explained. “Beyond the Challenges Facing Iran and the IAEA Concerning the Nuclear Dossier,” Rahbord, September 30, 2005, pp. 7-38.

8. In a 2005 interview, Rouhani described the IAEA board’s action as “the first time that the issue took on widespread international dimensions.” Mehdi Mohammadi, “Nuclear Case From Beginning to End in Interview With Dr. Hasan Rouhani (Part 1): We Are Testing Europe,” Keyhan, July 26, 2005.

10. Mohammadi, “Nuclear Case From Beginning to End in Interview With Dr. Hasan Rouhani (Part 1).”


12. Iran signed a joint statement with the IAEA on November 11, 2013, describing a Framework for Cooperation to resolve the outstanding issues in the IAEA investigation of Iran’s nuclear activities.

13. For example, Ali Akbar Salehi, who was Iran’s foreign minister during the presidency of Mahmoud Ahmadinejad and currently is head of the AEOI, concluded a November 2013 agreement with the IAEA concerning this issue. See “Salehi: Technical Experts to Participate in Talks Between Iran, G5+1,” Fars News Agency, January 5, 2014.


19. “Beyond the Challenges Facing Iran and the IAEA Concerning the Nuclear Dossier.”

20. The AEOI also had considerable freedom of action in the past. The 1977 U.S. diplomatic cable describes the AEOI as possessing “unusual authority to hire staff and to initiate a ‘high priority program.’” U.S. Embassy Tehran, “Atomic Energy Organization of Iran, AEOI.”

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