

# Iran's Nuclear Program—Countdown?

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Brief Analysis

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The IAEA's February 2003 visit to Iran revealed that Tehran's nuclear program was much more advanced than previously thought, raising questions about Iranian compliance with the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). This issue will be a major topic at the upcoming meeting of the IAEA Board of Governors. Another issue of importance in the coming months will be whether Tehran will meet Russian demands, reported in the press, that Iran sign the IAEA's "Additional Protocol" to its nuclear safeguards agreement as a condition for receiving fuel for the reactor at Bushehr. Should Russia officially make such a demand, it would set a precedent as the first country to tie nuclear assistance to the signing of the Additional Protocol's enhanced safeguards.

Although the IAEA had previously been informed of the existence of the Natanz nuclear site, the agency's February delegation (which included director-general Mohamed ElBaradei) was surprised to find an operating gas-centrifuge pilot cascade and components for an additional 1,000 centrifuges at a hardened, buried facility capable of accommodating thousands more centrifuges. Moreover, the existing centrifuges were of a fairly advanced design. With this discovery, Iran joined the rather exclusive club of some ten or so countries that produce gas centrifuges.

During the visit, the IAEA was forbidden from entering certain areas of the Kalayeh Electric Company facility near Tehran, which is believed to be the headquarters of the centrifuge effort. Since then, Iranian opposition groups have revealed the existence of two additional sites related to the centrifuge program. The IAEA will try to visit these sites and take environmental samples during their next visit. Such sampling is critical for verifying Iran's claims. The reported existence of these additional sites also drives home the point that Iran's centrifuge program has probably been dispersed, thereby greatly complicating preventive military action.

Another area of concern is the uranium hexafluoride production facility currently under construction at Esfahan. The facility is apparently being built with plans obtained from China (after the United States pressed China not to build an actual plant in Iran) and will provide the feedstock necessary for Iran's centrifuge program. Although this may be the weak link in Iran's nuclear program, there may yet be a pilot plant elsewhere that could produce feedstock if the Esfahan facility were destroyed in a preventive strike.

Iran insists that it is abiding by its NPT commitments and that its enrichment program is for the production of low-

enriched uranium fuel for reactors like the one being built at Bushehr. Nevertheless, if Iran continues with its current plans, it will acquire a significant breakout capability. A loophole in the NPT allows countries to create the infrastructure required to build nuclear weapons, withdraw from the NPT with three months notice (should the "supreme interests" of a member state so dictate), and then build nuclear weapons. All of this would, strictly speaking, be legal and aboveboard. For this reason, although Iran's signing of the Additional Protocol would be an important step, it might not prevent the emergence of a nuclear-armed Iran.

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As it considers its nuclear options, Iran has several choices. It could continue building up its nuclear infrastructure but remain within the NPT, thereby developing a rapid breakout capability that could allow it to create a large nuclear arsenal in a short period of time. This approach would confer many of the benefits of declared possession of nuclear weapons (e.g., Iran's neighbors would begin to treat it as a de facto nuclear state) without the drawbacks of violating NPT commitments. One risk associated with this approach is that Iran might not be able to produce nuclear weapons quickly enough to avert disaster during a fast-moving crisis.

A second option is to remain within the confines of the NPT while clandestinely developing a small nuclear arsenal as a hedge. Iran would thereby gain the benefits of apparent compliance with the NPT while holding a small nuclear arsenal that could be unveiled during a crisis. Iran might get caught before completing such a plan, however, with all the consequences that such a revelation could entail.

A third option is to publicly break out of or withdraw from the NPT and then produce nuclear weapons. This way, Iran could demonstrate to the Iranian people, the United States, and neighboring countries that it is a nuclear power. Iran could pay a steep price internationally for pursuing this route.

How might the possession of nuclear weapons alter Tehran's behavior? During the Cold War, nuclear weapons generally moderated superpower behavior. Conversely, such weapons have not prevented India and Pakistan from engaging in low-level conflict and approaching the nuclear brink several times, while Iraq's maturing weapons of mass destruction programs bred confidence that led to increasingly aggressive behavior in the late 1980s, culminating in the invasion of Kuwait. It is not clear which of these models might apply to a nuclear-armed Iran. In any case, political instability in Iran could make a stable deterrent relationship difficult to establish and sustain. In the event of widespread antiregime unrest, Tehran's reaction might be difficult to predict. If they thought the regime was threatened, hardline elements with access to Iran's nuclear arsenal might use such weapons against foreign powers that they believed to be behind the unrest or pass them on to terrorist groups aligned with Tehran.

What is to be done? The United States should continue efforts to delay the development of Iran's nuclear program by denying access to nuclear technology; mobilizing growing international concern about Iran's nuclear program in order to press Tehran into signing the Additional Protocol; encouraging the evolution of Iran's political system toward greater openness and democracy; and holding out the prospect of a "grand bargain" that would entail Iran agreeing to a verifiable freeze on all nuclear activities in return for an easing or lifting of economic sanctions and improved political and military ties across the board. The United States and others must make clear to Iran that cooperation in the nuclear sphere will beget improvements in Iran's political, economic, and security situation, whereas continuing down the current path will lead to a deterioration in all three areas. Finally, Washington should leave the possibility of preventive action on the table as a spur to diplomacy and an option of last resort, even if such action is fraught with risks and uncertainties.

This Special Policy Forum Report was prepared by Jason O'Connor.

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