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Monika Chansoria



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MONIKA CHANSORIA

More than a half-century into the nuclear age, the world continues to wrestle with the challenge of reconciling the development of nuclear energy for peaceful purposes along with efforts undertaken by states to use their nuclear knowledge, technology and assets to acquire nuclear weapons. The Iranian nuclear crisis came under the glare of publicity when international inspections since 2003 went onto reveal and highlight two decades' worth of undeclared nuclear activities in the Islamic Republic of Iran, including uranium enrichment and plutonium separation efforts. Even though the country has entered into negotiations, the world is hunting for the best way to get out of this crisis. This paper tracks the Iranian nuclear pursuit right from the onset, studies the findings of the International Atomic Energy Agency (IAEA) and analyses the potential ramifications of a nuclear Iran, including for India.

Iranian Nuclear History

The domestic political situation in Iran was alarming by the end of the 1950s owing primarily to the weakness of the economic and social structure in the country. In March 1951, the *Majlis* (Iranian Parliament) pressured the Shah to appoint Mohammad Mossadeq, leader of the National Front, as the prime minister.¹ Subsequently, Mossadeq took office and nationalised Iran's oil industry, thereby impounding the property of the Anglo-Iranian Oil Company. Soon after, the domestic situation in Iran deteriorated as a result of the worsening economic situation, which prompted the United States' Truman Administration to take steps to ensure that Iran did not fall under the communist umbrella, which included significant military, economic and technical assistance.² The ensuing events that unfolded in the following two

years in Iran led to the erosion of loyalty to Mossadeq among his supporters, thereby strengthening the hands of the Shah to dismiss him by signing a *farmaan* (royal order) to that effect in August 1953.

Later, the Eisenhower Administration too continued to provide technical and economic assistance to Iran.³ Soon enough, Iran enjoyed its strategic importance for the US Administration in the aftermath of the Suez Canal crisis in 1956, which comprised a landmark event and a turning point in the history of the Middle East.⁴ Thereafter, the “Eisenhower Doctrine” authorised the US president “to aid non-communist Middle Eastern nations threatened by armed aggression from any country controlled by international communism” as well as “to use armed forces to assist any such nation or group of nations requesting assistance.”⁵

It was in these conditions that Iran’s first acquaintance with nuclear science and technology came about, coupled with intensified US assistance to the country in the economic, military and technical fields, including nuclear science and technology. It also was the period when the US wanted to have its share in the burgeoning nuclear market where Britain and Canada in particular were quite active. However, there was a stumbling block to the US companies entering the market. In June 1946, the US Congress adopted the Atomic Energy Act (or the MacMohan Act), which was the first and, other than its successor, the Atomic Energy Act of 1954, to date the only US statute to establish a programme to restrict the dissemination of information. This Act transferred control of all aspects of atomic (nuclear) energy from the army, which had managed the government’s World War II Manhattan Project to produce atomic bombs, to a five-member civilian Atomic Energy Commission. The US Congress, by virtue of enacting the 1946 Atomic Energy Act, continued the Manhattan Project’s comprehensive and rigid controls on US information about atomic bombs and other aspects of atomic energy. Thus, the Act had to be amended, and the first of such amendments took place in 1954 with the famous “Atoms for Peace” speech of President Dwight Eisenhower before the United Nations General Assembly on December 8, 1953, paving the way for such a development.⁶ Indeed, the Shah’s former Foreign Minister, Ardeshir Zahedi, all but confirmed such concerns by stating, “The Iranian strategy at that time was aimed at creating what is known as surge capacity, that is to say, to have the knowhow, the infrastructure, and the personnel needed to develop a nuclear

military capacity within a short time without actually doing so. But the assumption within the policy-making elite was that Iran should be in a position to develop and test a nuclear device within 18 months.”⁷ Furthermore, Akbar Etemad, the then director of Iran’s nuclear programme, similarly endorsed Zahedi’s claim that the Shah’s programme was designed to grant him the option of assembling the bomb should his regional competitors move in that direction.⁸

Accordingly, the US and Iran signed the Agreement for Cooperation Concerning Civil Uses of Atoms in 1957 after a period of negotiation of about two years which was later extended for another ten years in 1969.⁹ The Shah ordered the establishment of the Tehran Nuclear Research Centre at the Tehran University and began negotiating with the US on the purchase of a 5-megawatt (MW) thermal research reactor for the centre in 1959.¹⁰ In the beginning, the research was mostly limited to post-graduate education and research activities in basic nuclear science and techniques.¹¹ Furthermore, the first announcement regarding Iran’s intention to build nuclear reactors was made on December 18, 1972, when Iran’s Ministry of Water and Power undertook a study on the feasibility of constructing a nuclear power plant in southern Iran.¹²

A major breakthrough in the US-Iran cooperation in the nuclear field came through with the historic visit of President Richard Nixon to Tehran in May 1972. The visit was a fundamental shift in power relations that took place in the Persian Gulf, paving the way for the “Nixon Doctrine” that outlined the “US’ intent to place greater emphasis on initiatives by regionally influential states to assure stability and security of their respective regions.”¹³ To start with, the Shah had envisioned Iran to have 10,000 MW installed nuclear capacity by 1990. However, a 1974 study by the Stanford Research Institute concluded that Iran would need 20,000 MW nuclear power capacity “as soon as possible.”¹⁴ To achieve this goal, the Shah established the Atomic Energy Organisation of Iran (AEOI) 1974 and announced a 20-year nuclear energy plan that included building 22 power reactors throughout the country. In 1976, the budget for the AEOI was increased from \$ 30.8 million to \$ 1 billion a year.¹⁵

Thus, the historic statement made by the Shah in March 1974, declaring the goal of establishing five (electric) nuclear power reactors of 23,000 MW capacity to become operational in the next 20 years, did not come as

a surprise. It was indeed a culmination of the opening of the Nuclear Non-Proliferation Treaty (NPT) to signature in July 1968 after decade-long negotiations.¹⁶ Iran became one of the first signatories of the NPT and the *Majlis* ratified the treaty in February 1970, which entered into force in March 1970. On March 3, 1975, Iran and the United States signed a \$15 billion agreement for the construction of eight nuclear power reactors having a total capacity of 8,000 MW.¹⁷ Apart from US investment in Iran's nuclear programme, Iran proposed to invest \$2.75 billion in a uranium enrichment facility in the US. The Ford Administration agreed to the proposal and decided "to set the fuel ceiling at a level reflecting the approximate number of nuclear reactors planned for purchase from the US suppliers to cover Iran's full nuclear requirement under the proviso that the fuel represents Iran's entitlement from their proposed investment in an enrichment facility in the US."¹⁸

Nuclear Pursuit in the Post-Revolution Period

The Iranian Islamic Revolution of February 1979 put everything in the area of nuclear cooperation between the US and Iran on hold, with Tehran's nuclear science and technology transfer from the US and the Europeans coming to a sudden halt, sealed with the return of Iman Khomeini from exile to Tehran. Thereafter, the US-Iranian relations have been marked by intense hostility and disdain. The US not only stopped cooperating with Iran in the nuclear field, but also pursued a policy of denial by putting pressure on other countries not to transfer nuclear technology to Iran. However, in its entirety, the nuclear programme that the Khomeini regime inherited in 1979 was still "by far the most ambitious in the Middle East."¹⁹

Tehran's nuclear programme received a setback with the arrival of Khomeini's regime in the beginning of the 1980s. After the revolution, the Iranian regime inherited the remnants of the Shah's ambitious nuclear programme. Even though Tehran's drive for a nuclear programme met stiff challenges in the 1980s, despite these setbacks, research and planning for a nuclear arsenal continued. Factors that slowed some aspects of the overall nuclear programme included the Iran-Iraq War and the refusal of the German company Kraftwerk to resume work on the two reactors at Bushehr because of Iraq's repeated air attacks on the site.²⁰ However, the severe energy crisis in the post-revolutionary period was a prime reason as

to why the top Iranian clergy changed their attitude to nuclear projects. During the early 1980s, President Ali Akbar Hashemi Rafsanjani received an approval from Khomeini to go ahead and ask the German and French companies to resume construction of nuclear power plants. The German firm KWU that had been building the Bushehr plant refused to assist Tehran due to what was suspected as US pressure. Nor did the French company Framatome agree on two 950 MW reactors at Darkhovin, or on the construction of the Isfahan Nuclear Research Centre.²¹

Iran then turned to other potential suppliers such as Pakistan, China and the erstwhile Soviet Union. In 1984, the regime built a new nuclear research laboratory at the Isfahan Nuclear Technology Centre (INTC), the facility that had originally been built by the Shah in the 1970s as a training centre for Bushehr personnel. With vital assistance from China, the expansion included several new buildings, some underground, resulting in a large complex. China's impact on the development of the INTC in the 1980s included supplying a "training reactor" in 1985, the first of four small research reactors that China would install at the research centre over the next ten years.²² It was discovered that the research at this centre involved experiments in uranium conversion and fuel production—a violation of Iran's NPT obligations.²³ The IAEA later reported that, contrary to what the Iranian regime had told them up to 2003, "...practically all of the materials important to uranium conversion had been produced in laboratory and bench scale experiments [in kilogram quantities] between 1981 and 1993 without having been reported to the agency."²⁴

In this backdrop, the Iranian nuclear crisis reached a tipping point in 2002 when the world's attention turned towards the Iranian nuclear ambitions. The onus now turned towards the IAEA, the world's central agency of cooperation in the nuclear field that works with its member states as well as with multiple partners worldwide to promote safe, secure and peaceful nuclear technologies. To start with, the IAEA was set up as the world's "Atoms for Peace" organisation in 1957 within the United Nations family and as an independent international organisation related to the United Nations, the IAEA reports annually to the UN General Assembly and, when appropriate, to the Security Council regarding non-compliance by states with their safeguards obligations.

Iran's Nuclear Case at the IAEA and UN Security Council

The controversy surrounding the Iranian nuclear weapons programme touched elevated levels during 2002, as the situation changed significantly with the revelations about Iran's clandestine work on sensitive nuclear technologies, which may have direct bearing on nuclear weapons production. On August 14, 2002, during a Press conference in Washington D.C., the US Representative Office of the National Council of Resistance of Iran identified the secret nuclear projects of Iran, namely, the uranium centrifuge enrichment facility at Natanz and the heavy water production facility in Arak. The discovery of the plants in Natanz and Arak suggested that Iran had made considerable progress on these two different routes to nuclear weapons throughout the 1990s, despite the sanctions imposed by Washington.

Subsequently, the year 2004 turned out to be one of the most astounding in the nuclear non-proliferation community when the world officially discovered that Pakistani scientist Abdul Qadeer Khan had engineered an illicit and clandestine nuclear black market that, in fact, provided nuclear weapons-related technology to a number of countries, including North Korea, Iran, and Libya. Iran was among the first buyers in Khan's venture, going by what the Iranian regime admitted to the IAEA in 2003, that it had begun uranium enrichment in 1985 and had received blueprints for centrifuge design "through a foreign intermediary in around 1987."²⁵ Following his arrest, Khan confessed that he was the "foreign supplier" who had provided Iran with designs, drawings and components related to nuclear weapons.²⁶

In fact, the arrest of AQ Khan was a direct result of the IAEA inspections of Iran's uranium-enrichment plant in Natanz, which had been built and developed since 2000 onwards. The revelation in August 2000 launched the IAEA's investigation of the site, which, in turn, uncovered technological evidence that pointed to Pakistan as the supplier of the centrifuge technology.²⁷ Significantly, IAEA Director General Mohamed El Baradei described Khan's individual involvement as just the "tip of the iceberg" of illegal nuclear technology trafficking throughout the world.²⁸ Following the August 2002 revelations, the IAEA requested a visit to the heavy water facility in Arak. Iran agreed to the IAEA visit in February 2003, which confirmed that Iran was building the heavy water production plant in Arak. In a letter written to the IAEA three months later, Tehran confirmed that it planned to construct a 40 MW heavy water research reactor, the IR-40, at

the same site.²⁹ IAEA inspectors visited Arak in March 2005 to carry out their standard design information verification (DIV) and observed that construction was ongoing on both the heavy water production plant and the reactor. Tehran had informed the inspectors that they planned to have the heavy water reactor on line in 2014.³⁰

The second facility that was surrounded by controversy in August 2002 was the centrifuge enrichment facility at Natanz, about 200 miles south of Tehran. The Natanz site contained a pilot-scale centrifuge plant and a partially completed industrial scale centrifuge facility. Tehran first declared that an old European-designed centrifuge called P-1 was in use at Natanz, but inspectors later discovered that Iran was developing a P-2 centrifuge, that is a newer and more sophisticated design. In February 2003, Iranian President Khatami officially acknowledged the existence of the Natanz and Arak facilities and full fuel cycle plans. Subsequently, the IAEA officials visited Iran several times and were allowed to take environmental samples at the Natanz facility. The analysis of these samples revealed particles of both low enriched uranium (LEU) and high enriched uranium (HEU). On its part, Tehran attributed the particles of HEU to contamination originating from imported centrifuge components, thereby admitting that Iran had in fact collaborated with the AQ Khan network.

When IAEA inspectors first visited the site in February 2003, there were more than 100 centrifuges installed at the pilot facility, which was constructed to hold a maximum of about 1,000 centrifuges.³¹ After its initial inspections of Natanz in 2003, the IAEA determined that Iran had, in fact, violated its IAEA safeguards agreements by not reporting the nuclear material, as well as the subsequent processing and use of that material, and by not declaring where the material was stored and processed.³² In his report to the IAEA Board of Governors in November 2003, IAEA Director General Mohamed El Baradei revealed the scope of Iran's covert nuclear programme, including development of uranium enrichment, conversion and reprocessing capabilities. Moreover, El Baradei concluded, "Iran has failed to meet its obligations under its Safeguards Agreement."

The discovery of the plants at Natanz and Arak raised the suspicions that Tehran had been working toward creating a complete fuel cycle that would produce highly enriched uranium and plutonium, in violation of its obligation to the NPT. Although there is a belief that these facilities would be used for

peaceful purposes, the potential prospect that the acquired nuclear capability could well be diverted to produce weapons-grade fissile material such as highly enriched uranium and plutonium that are necessary for the manufacture of nuclear weapons, cannot be ruled out entirely. The US has time and again reiterated that Iran's effort to build undeclared uranium enrichment facilities in Natanz was a clear violation of Article II of the NPT³³ and further argued that Iran should not be entitled to exercise its rights under Article IV of the same treaty to develop nuclear technology.³⁴ On the other hand, Iran invokes Article IV of the treaty in defending its occupation with various nuclear projects, including enrichment as well as reprocessing. As a matter of fact, Iran continues to hold that nothing in the treaty should affect the "inalienable right" of the member states to develop nuclear energy for peaceful purposes, and they flatly reject the US request to stop enriching uranium. Besides, according to *Jomhuri-ye Islami*, a conservative newspaper, considered as the mouthpiece of Khomeini, "The core problem is the fact that the outlook on the nuclear dossier of Iran is faulty and they are on the wrong track...It seems they have failed to appreciate that America is after our destruction and the nuclear issue is merely an excuse for them."³⁵

In fact, during talks with former Russian President Vladimir Putin in early July 2004, the IAEA director-general concurred with the Russian assessment and Iranian claims, stating, "Bushehr facility is not at the center of international concern because Bushehr is a project to produce nuclear energy."³⁶ As a matter of fact, Bushehr is not currently a major concern as long as it remains open to intrusive IAEA inspections and the spent fuel is returned to Russia, but this arrangement may change in the future. Iran has stated that in the long-term, it intends to produce its own fuel for Bushehr. Without consistent intrusive inspections and verifications, there is a potential proliferation problem if spent fuel rods from Bushehr can be diverted to secret undisclosed facilities for plutonium production. Once enough plutonium has been produced, Iran could build nuclear weapons in a short time. From a non-proliferation standpoint, in the absence of IAEA intrusive verifications and inspections, the facility at Natanz can become a major concern. When completed, it is estimated that Natanz will be capable of producing weapons-grade uranium sufficient for several weapons per year, employing more than 50,000 centrifuges.³⁷ Moreover, the Arak facility is the site of two planned heavy water facilities and, according to estimates, the

plant will be able to produce 8 to 10 kg of weapons-grade plutonium every year, a sufficient amount to build one to two nuclear weapons annually.³⁸ It would be imperative to mention here that Iran is not dependent on foreign imports for nuclear technology and already has available the raw materials, and most of the designs and techniques, required to pursue a nuclear weapons programme. Iran has the necessary knowhow and has already produced every stage of the nuclear fuel cycle. Furthermore, Iran has uranium mines in Yazd and is in the process of constructing milling plants to manufacture yellow cake uranium and conversion plants that convert it to UF₆ gas.³⁹

Subsequently, IAEA Director-General El Baradei submitted a report to the IAEA Board of Governors on June 6, 2003, detailing Iran's clandestine nuclear activities that were not in compliance with its safeguards agreement. In particular, the report cited Tehran's failure to disclose its importation of nuclear material; the use of that material in various nuclear activities; and the facilities where the material—as well as nuclear waste—was stored and processed. The report revealed that Iran imported 1,800 kg of uranium hexafluoride, uranium tetra fluoride, and uranium dioxide in 1991 without reporting to the IAEA that it did so—a violation of its safeguards agreement.

In this context, the UN Security Council (UNSC) Resolutions 1696 (2006), 1737 (2006) and 1747 (2007) expressed conviction that Iran shall without further delay suspend the proliferation sensitive nuclear activities of all enrichment-related and reprocessing activities, including research and development, to be verified by the IAEA; and work on all heavy water-related projects, including the construction of a research reactor moderated by heavy water, also to be verified by the IAEA; as well as full, verified Iranian compliance with the requirements set out by the IAEA Board of Governors would contribute to a diplomatic, negotiated solution, that guarantees Iran's nuclear programme is exclusively for peaceful purposes. However, contrary to the decisions taken earlier by the Security Council, Iran has not yet suspended its enrichment related activities, having continued the operation of the Pilot Fuel Enrichment Plant (PFEP) and Fuel Enrichment Plant (FEP) and the installation of both new cascades and new generation centrifuges for test purposes. Iran has also continued with the construction of the IR-40 reactor.

Furthermore, a facility of special interest to the IAEA, is called the Kalaye Electric Company, where Tehran acknowledged that it had

produced “centrifuge components” and the IAEA asked to conduct inspections and environmental sampling at the site to verify “the absence of undeclared nuclear material and activities.” The report categorically stated that Iranian officials allowed the inspectors to visit the facility after some hesitation, but did not allow environmental sampling. Tehran’s denial of environmental sampling hinders the smooth flow of IAEA’s safeguards system since it aims to provide assurance not only that declared material is not diverted, through more effective international safeguards, but also that there are no undeclared nuclear activities. To do this effectively requires broad information from states on nuclear and nuclear-related activities, and access for IAEA inspectors, as well as more simplified administrative procedures for inspections. Besides, under an Additional Protocol, which is the key to the strengthened safeguards system, a state is required to provide the IAEA with broader information covering all aspects of its nuclear fuel cycle-related activities, including research and development and uranium mining. States must also grant the agency broader access rights and enable it to use the most advanced verification technologies. Specific measures provided for in an Additional Protocol include collection of environmental samples beyond declared locations when deemed necessary by the IAEA.

In April 2008, Iran informed the agency about the planned installation of a new generation sub-critical centrifuge (IR-3) at the PFEP. The agency confirmed in April 2008 that two IR-3 centrifuges had been installed at PFEP. In February 2008, agency inspectors noted that Iran had also brought 20 IR-1 centrifuges into PFEP, which were run in a 20-machine cascade for a short time, after which they were removed. Between January and May 2008, Iran fed a total of approximately 19 kg of UF₆ into the 20-machine IR-1 cascade, the single IR-2 centrifuges, the 10-machine IR-2 cascade and the single IR-3 centrifuges at PFEP. Furthermore, all nuclear material at PFEP, as well as the cascade area, remains under agency containment and surveillance. The results of the environmental samples taken at FEP and PFEP indicate that the plants have been operated as declared. The samples showed low enriched uranium (with up to 4.0 per cent U-235), natural uranium and depleted uranium (down to 0.4 per cent U-235) particles. Iran declared enrichment levels in FEP of up to 4.7 per cent U-235. Since March 2007, fourteen unannounced inspections have been conducted.⁴⁰

During April 2008, the IAEA requested Iran to 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. Significantly, till date, Iran has not agreed to the agency's request, raising speculation as to the potential military dimensions to the entire issue. In addition to the implementation of Iran's Additional Protocol, for the IAEA to provide assurances regarding the absence of undeclared nuclear material and activities in Iran, Tehran is required to undertake and fulfill the following:

- Resolve questions and provide more information related to the circumstances of the acquisition of the uranium metal document.
- Clarify procurement and R&D activities of military related institutes and companies that could be nuclear related.
- Clarify the production of nuclear equipment and components by companies belonging to defence industries.

As part of the May 2008 report to the Board of Governors, IAEA Director-General Mohamed El Baradei accounted on the implementation of the NPT Safeguards Agreement in Security Council Resolution 1803 (2008) of March 3, 2008. Iranian enrichment activities continued since the previous report, in which Iran sustained the operation of the original 3000-machine IR-1 unit⁴¹ at the FEP. Installation work has continued on four other units as well. On May 7, 2008, two 164-machine (IR-1) cascades of one of the four units were being fed with UF₆ and another cascade of that same unit was in vacuum without UF₆. The installation of the other 15 cascades at that unit is continuing. All nuclear material at FEP, as well as all installed cascades, remain under agency containment and surveillance.⁴² Between the physical inventory taking (PIT) during December 2007 and May 2008, 2,300 kg of UF₆ was fed into the operating cascades. This brings the total amount of UF₆ fed into the cascades since the beginning of operations in February 2007 to 3,970 kg.⁴³

During May 2008, the IAEA carried out design information verification at the Iran Nuclear Research Reactor (IR-40) and noted that construction of the facility was ongoing. The agency has continued to monitor the status of the Heavy Water Production Plant using satellite imagery. In March and April 2008, Iran provided revised design information for FEP and PFEP, indicating that centrifuges in the new 18-cascade unit would be installed in FEP and that new types of centrifuges, IR-2 and IR-3, would be installed at PFEP. These

changes are significant and as such should have been communicated to the agency, in accordance with Code 3.1 of the Subsidiary Arrangements General Part, sixty days before the modifications were scheduled to be completed. The agency was, however, able to ensure that all necessary safeguards measures, including containment and surveillance, were in place before UF₆ was fed into the newly installed centrifuges. One aspect of the alleged studies refers to the conversion of uranium dioxide to UF₄ also known as green salt. A second aspect concerns the development and testing of high voltage detonator firing equipment and exploding bridge wire (EBW) detonators, including the simultaneous firing of multiple EBW detonators; an underground testing arrangement; and the testing of at least one full scale hemispherical, converging, explosively driven shock system that could be applicable to an implosion-type nuclear device. A third aspect of the studies concerns development work alleged to have been performed to redesign the inner cone of the Shahab-III missile re-entry vehicle to accommodate a nuclear warhead.

In response, Iran provided in writing its overall assessment of the documents presented to it by the IAEA. Iran stated that the documents “do not show any indication that the Islamic Republic of Iran has been working on [a] nuclear weapon.” Iran also stated that the documents were not authentic, that they were “forged” or “fabricated.” Iran did not dispute that some of the information contained in the documents was factually accurate, but said the events and activities concerned involved civil or conventional military applications. Iran maintained the documents contained numerous inconsistencies and many were based on publicly available information. Iran stated, “The Islamic Republic of Iran has not had and shall not have any nuclear weapon programme.”⁴⁴ This statement is much in contrast to the rhetoric of Iranian President Ahmadinejad who time and again has reiterated his country’s commitment to the nuclear programme.

Concerning the documents purporting to show administrative interconnections between the alleged green salt project and a project to modify the Shahab-III missile to carry a nuclear warhead, Iran stated that since some of the documents were not shown to it by the agency, it could not make an assessment of them. The agency is continuing to assess the information and explanations provided by Iran. However, at this stage, Iran has not provided the agency with all the information, access to documents

and access to individuals necessary to support Iran's statements. In the light of the above discussion, the IAEA is expected to move towards a conclusion that Iran may have additional information, in particular on high explosives testing and missile related activities, which could shed more light on the nature of these alleged studies and which Iran should share with the agency. Furthermore, it should be noted that the IAEA currently has no information – apart from the uranium metal document – on the actual design or manufacture by Iran of nuclear material components of a nuclear weapon or of certain other key components, such as initiators, or on related nuclear physics studies.

The scenario of greatest concern circulating at the moment is that once Iran is able to produce quantities of low enriched uranium, it is likely to build a stockpile of the material and, if it has not done so by this point, finish designing the bomb and building its non-nuclear components. It would then be in a position to withdraw from the NPT, as called for by some of Tehran's hardline dailies (as North Korea did in January 2003) and then upgrade its stocks of enriched uranium to weapons grade and fabricate complete nuclear weapons. For this matter, Tehran surely would have been tracking Pyongyang's nuclear journey right from scratch. These realities point that Tehran's refusal to take mandatory steps is leading towards making this a more complex crisis with possibilities of a negotiated solution nearing a dead end. As a consequence, attacks on Iranian nuclear facilities in Arak, Isfahan, Natanz and Bushehr could have adverse effects on US interests in the Middle East and the world.

By means of adopting the UN Security Council Resolution 1803 in March 2008, the Security Council confirmed the 2008 report of the director-general of the IAEA that Iran had not established full and sustained suspension of all enrichment related and reprocessing activities and heavy water-related projects as set out in Resolutions 1696 (2006), 1737 (2006), and 1747 (2007), nor resumed its cooperation with the IAEA under the Additional Protocol, nor taken the other steps required by the IAEA Board of Governors, nor complied with the provisions of Security Council Resolutions 1696 (2006), 1737 (2006) and 1747 (2007), which are essential to build confidence.⁴⁵ The United Nations Security Council voted 14-0, with one abstention to impose a fresh set of sanctions against Iran for failing to suspend its civilian nuclear fuel cycle programme. The resolution had the

backing of not just the United States, Britain and France but also Russia and China. Crucially, Resolution 1803 authorises the US military to inspect all air and sea cargo into and out of Iran on board Iranian vessels if “there are reasonable grounds to believe that the aircraft or vessel is transporting goods prohibited under this resolution.”⁴⁶ Enabling this provision could well set off a showdown between the US, which commands a vast naval presence around the Persian Gulf area, and Iran.

Implications: Domestic, Regional and International

Domestic Politics Within Iran

In the light of the above resolution and the fresh initiatives to resolve the impasse, the Permanent Mission of the Islamic Republic of Iran communicated to the IAEA, “In this new round of negotiations, the main objective of the Islamic Republic of Iran is to reach a comprehensive agreement—one that is based on collective goodwill—that will help to establish long-term cooperation between the parties and contribute to the sustainability and strength of regional and international security and a just peace. The main outcome of this new round of negotiations would be an agreement on ‘collective commitments’ to cooperate on economic, political, regional, international, nuclear and energy security issues.”⁴⁷

The ongoing nuclear crisis in Iran, along with the possibility of attacks on its nuclear sites is likely to have a bearing on the domestic policies within Iran. The political struggle between the conservatives and the moderates has come out in the open, more so since Iran’s chief nuclear negotiator Ali Larijani and President Ahmadinejad, both of whom belong to the ruling conservative coalition, have divergent approaches towards the issue, resulting in Larijani’s repeated attempts at resignation. According to *Asharqalawsat*, a pan-Arab daily, “Larijani has declared that Iran is not interested in a nuclear weapon, while Ahmadinejad keeps repeating that enrichment is ongoing and will not stop,” fuelling the impression that the country’s nuclear programme has more than the production of energy as its goal and may culminate in a weapons programme.⁴⁸ In addition, Larijani reportedly enjoys close access to Khomeini, as reported in the *Khaleej Times* when it stated, “While Ahmadinejad nominally is ‘President’ of the Security Council, in reality Larijani receives his orders from supreme leader Ayatollah Ali Khomeini whose confidence he is

believed to enjoy.”⁴⁹ Larijani’s repeated attempts at tendering his resignation are being viewed as a means to distance himself from President Ahmadinejad at a time when many voices within Iran have criticised Ahmadinejad’s lack of diplomacy. Larijani’s negotiations with the European Union (EU), the IAEA and the US, aimed at achieving a breakthrough in the negotiations, might enhance his domestic political stature. Besides, President Ahmadinejad has always been under the scanner for his blazing rhetoric vis-à-vis the Iranian nuclear pursuit. While addressing a massive gathering marking the 29th anniversary of the Islamic Revolution at Tehran’s Azadi Square, Ahmadinejad stressed, “On Iran’s nuclear programme, they have spoiled their own reputation and that of the UN Security Council, proving the Council’s inefficiency. Some of the Security Council’s permanent members, in the name of peace and security, made anti-Iran decisions based on their wrong perception and dictated it to the Council. They should know that the Iranian nation would never give up its nuclear rights.”⁵⁰ While greeting Iranians on the occasion of the country’s National Nuclear Technology Day, Iranian Ambassador to India, Seyed Mehid Nabizadeh, said, “Due to the sustained and intensive efforts of the scientists and the backing of the people, we have achieved a unique success in obtaining peaceful nuclear technology... we have succeeded in finding a place among the 9 countries. This is a great honor for the people and the Government of Iran.”⁵¹

The domestic struggle within the conservatives came to the forefront when in September 2007 Supreme Leader Khomeini appointed Mohammad Ali Jafari as the new commander of the Islamic Revolutionary Guards Corps (IRGC) and subsequently within a week elected former Iranian President Hashemi Rafsanjani as president of the Assembly of Experts. The two promotions come at a time when Iran is under the international scanner vis-à-vis its nuclear programme, with both Jafari and Rafsanjani being considered moderate conservatives aligned with factions that have been critical of the radical politics of President Mahmoud Ahmadinejad.

However, a sizeable section of the Iranians view Iran’s nuclear facilities as a symbol of national pride and technological progress. Therefore, there is an emerging sense that the Iranian regime has no misgivings when it comes to the advancement of the nuclear programme. This statement derives more legitimacy with the fact that during the legislative elections for the *Majlis* held in March 2008, the conservatives won a majority of the seats where innovation

and progress on the nuclear programme was a key issue. Furthermore, it would be significant to witness the Iranian Presidential elections in mid-2009 in which incumbent President Mahmoud Ahmadinejad is likely to seek re-election in all probability. Consequently, this election has widely been described as a contest in which hardliners are expected to support President Ahmadinejad and their victory would be interpreted as a triumph portraying the Iranians' defiance of the West, particularly on the nuclear issue. While Ahmadinejad may not have final authority over Iran's nuclear policy, he certainly seems to wield considerable influence over those who do.

Regional Impact: Potential Israeli Air Strikes

According to numerous reports that have come out recently, Israel is closely negotiating with the United States for permission to use Iraqi air space as part of a plan to attack Iran's nuclear facilities. To conduct surgical air strikes against Iran's nuclear programme, Israeli war planes would need to fly across Iraq and the Israeli military authorities in Tel Aviv need permission, along with substantial elements of coordination with the Pentagon in order to do so. A senior Israeli defence official said negotiations were now underway between the two countries for the US-led coalition in Iraq to provide an 'air corridor' in the event of the Israeli government deciding on unilateral military action to prevent Tehran from developing nuclear weapons. "The only way to do this is to fly through US-controlled air space."⁵² In the light of this statement, it appears that Israel's military establishment is moving on a war-footing, with preparations to launch potential air strikes against Tehran if diplomatic efforts fail to resolve the nuclear crisis.

Significantly, the pace of military planning in Israel has accelerated markedly since the beginning of 2008 after the Israeli intelligence service, Mossad, provided a stark intelligence assessment that Iran, given the current rate of progress being made on its uranium enrichment programme, could have enough fissile material for a nuclear warhead by 2009. The fact that since June 2008, Israel has conducted complex military exercises, involving more than 150 aircraft flying 900 miles over the Mediterranean Sea, gives impetus to this ramification—a move that is widely being viewed as a rehearsal for an air strike against Iranian nuclear facilities. Israel also nurses concerns that Tehran is developing a cruise missile that can evade interception by the Arrow, the Israeli Defence Force's (IDF's) anti-ballistic missile defence

system.⁵³ Iran's development of missiles powerful enough to carry nuclear warheads considerable distances, in particular the Shahab-III, is further poised to escalate the crisis throughout the Middle East. Tested during a military exercise in November 2006, the system is based on the North Korean Nodong missile and is capable of striking Israel.⁵⁴ Moreover, Iranian Defence Minister Mostafa Mohammad-Najjar reported on November 27, 2007, about the building and preparations for testing the indigenously produced solid-fuelled ballistic missile, Ashura, with a range of 2,000 to 2,500 km.⁵⁵

In case talks break down, Israel would have to undertake the decision of going all out against Tehran by itself, but it would be imperative to mention here that Israel would surely seek much more than mere logistical support from the US. Launching long-range strikes against a multitude of hidden targets in Iran entails huge risks and uncertain rewards, according to Ephraim Halevy, the previous Mossad chief who doubts that Iran's ally Syria, or Hezbollah would risk a major dust-up merely to exact revenge on Iran's behalf. Still, Halevy warns that the long-term effects of attacking Iran could be devastating for Israel—and the region. "This could have an impact on us for the next 100 years and would have a negative effect on public opinion in the Arab world."⁵⁶ President Ahmadinejad all along has continued his tough rhetoric against Israel; while meeting the head of the Palestinian Liberation Organisation's (PLO's) political bureau, Farouk Kaddoumi, he said, "Tel Aviv regime has always been pursuing aggression, violence, and atrocities in the region." He further stressed, "The West only moves in line with the Zionists interest and does not think about settlement of the regional disputes."⁵⁷

Moreover, the possibility of Iranian facilities being targeted by preemptive strikes has widely been under speculation, with the White House reiterating time and again that the "military option" is always on the table, and President Bush's statement way back in 2004. Reflecting the same, he said, "I think the message is getting delivered to Iran that it's intolerable if they develop a nuclear weapon. It would be intolerable to peace and stability in the Middle East if they get a nuclear weapon, particularly since their stated objective is the destruction of Israel."⁵⁸ A liable Iranian response would be inclusive of an immediate Iranian missile counter-attack on Israel and US bases in the Gulf, followed by serious efforts to further destabilise Iraq and induce the Lebanese Hezbollah to launch a series of rocket attacks on Northern Israel. Iran's potentially most dangerous response to an American or Israeli attack

on its nuclear facilities might be a serious and sustained Iranian effort to destabilise post-war Iraq where the Iranian Revolutionary Guards could well infiltrate the border in huge numbers to promote a full-blown guerrilla war against the US presence in Iraq and work with tens of thousands of Iraqis in Shiite militias proving instrumental towards accomplishing that goal. Besides, open source information suggests that currently Iran possesses more than 500 Shahab ballistic missiles. Most of these missiles, for instance, Shahab-I and II with a 300 to 500-km range and a 700-985 kg payload are capable of reaching US bases in Oman, Qatar, Kuwait, and Iraq. In addition, Iran is also believed to possess 25 to 100 Shahab-III ballistic missiles, displayed in a military parade marking the anniversary of the Iran-Iraq War on September 22, 2003.⁵⁹ The Shahab-III has a 1,300 km range with 700 kg payload, and is capable of reaching Israeli cities as well as bases. It is difficult to assess and determine at this stage whether the Israeli Arrow system is truly capable of neutralising Iran's arsenal of Shahab-III as it still stands to be battle tested.

However, the strategy of preemptive air strikes comes with a number of impediments, whether they are conducted by Israel or the United States. For instance, Iraq's Osirak facility was one easily identified, aboveground site. On the other hand, there are numerous hidden nuclear-related sites in Iran—many of which are in or near major population centres, maximising the probable number of civilian casualties in an attack. Indeed, thousands of innocent Iranians would likely perish in a campaign of air strikes. Attacking Iran would also further alienate Muslim populations around the world, creating the very real prospect of a war of civilisations. The threat of the Iranian regime, with the support of Hezbollah, hitting American targets throughout the Middle East looms large, thereby, escalating the crisis in the entire Middle East. Besides, there is always the risk that an attacked and humiliated Iran might contemplate closing of the Strait of Hormuz, acting as a trigger towards making one reality absolutely believable—the ever-disturbing destabilisation of the Middle East.

International Ramifications

There is reason to doubt whether the UN sanctions would have a significant impact on Iran's nuclear programme given that sanctions have a less than stellar record of inducing regimes to change policies—especially to abandon high-priority, high-prestige projects and Iran's nuclear programme clearly

belongs in that category.⁶⁰ The fact that Iran is a major oil producer is another factor reducing the probable effectiveness of any UN sanctions resolution given the ever-increasing dependency on oil. The fluctuating crude oil prices outline an outward trend due to a combination of geo-economic reasons with the world becoming far more dependent on oil than it was in the past decades. President of the Organisation of Petroleum Exporting Countries (OPEC), Chakib Khelil, has ruled out the possibility of a rise in crude output and stated that OPEC would not consider increasing oil production during the winter, adding that the cartel would not boost its output to bring prices down. Besides, exporters add that a weakening US dollar is driving up oil prices, not a shortage of supply.⁶¹ These conditions make evident that ongoing uncertainty in the geo-political situation in oil-rich countries such as Iran would impact upon many countries in a direct or indirect manner.

Therefore, bringing all major powers on board to take outward punitive measures against Tehran would be an uphill task. A critical question at this stage is whether Washington would find success in inducing major EU powers, Russia, China, Japan, and India to impose serious sanctions involving military strikes against Iran given that defection of one or more of those countries appears more than likely. All of these nations have important investments in Iran. Significantly, although Security Council resolutions have the backing of Russia and China, both have already made categorically clear they were disappointed with Iran's stonewalling.⁶² It would be significant to mention here that all through this while, China, in particular, has been resisting imposition of sanctions on Iran which is the world's fourth largest oil producer. China shares a close and budding economic and military relationship with Iran and Beijing's appetite for oil and its heavy investments in Iran surely affect its stance on Tehran's nuclear issue. In 2004, China consumed 6.5 million barrels of oil a day and overtook Japan as the world's second largest user of petroleum products. Moreover, China's state-owned oil giant Sinopec signed a \$ 70 billion deal with the Iranian government in November 2004 so as to develop the Yadavaran oil field. According to the US Department of Energy, on completion, this field could eventually produce 300,000 barrels a day, giving China the much required quantum of oil for its energy requirements. Beijing repeatedly has stated a clear preference for employing diplomacy over sanctions and tended to avoid getting involved in

international rows of this scale. Following this pattern, Beijing has passively played a supporting role to Russia and backed a plan proposed by Moscow that would bring Iran's uranium reprocessing to Russian soil—thus, removing from Iranian facilities this important step of the fuel cycle that can be used to manufacture fissile material.

As for Russia, it has stated that a nuclear-armed Iran is unacceptable since after all, any nuclear-armed missiles Tehran might develop are likely capable to reach Russian territory. At the same time, Russia largely agrees that Iran has a right to nuclear power as a signatory to the NPT and the difficulty is to reconcile these two principles and negotiate a compromise. Crucially, Russia is deeply involved in the Iranian energy market and holds Tehran to be politically critical to the stability of Russia's southern borderlands. Iranian influence in the Caucasus is quite strong, for instance, in Azerbaijan where 20 million Azeris live and share the Shiite faith. While emphasising the need for continuing referral of Iran to the Security Council, EU member states—including the EU-3—have expressed their desire to reach a peaceful settlement of the dispute and bring the Iranians back to the negotiating table. Major powers like China and Russia are the most likely options to broker a compromise, with high riding concerns that Iran not withdraw from the NPT and openly commence a weapons programme.

Javier Solana, the European Union's foreign policy chief's repeated meetings with Ali Larijani, have been unable to strike an accord over the chief obstacle as to which would come first, the beginning of the negotiations or the suspension of Tehran's gas centrifuge-based uranium-enrichment programme. A package of incentives and disincentives, including providing Iran with nuclear energy, in addition to part ownership of a Russian enrichment facility, a five-year 'buffer stock' of enriched uranium stored under IAEA supervision, and multilateral ventures to provide a light water nuclear power reactor. Additionally, the proposal includes measures for economic cooperation with, and technology transfers to, Iran. However, this offer by China, France, Germany, Russia, the United Kingdom, and the United States requires Iran to enact such a suspension before negotiations can begin. Tehran could be willing to consider suspending the programme but continues to resist doing so before beginning negotiations—a prime stumbling block. Tehran wants its interlocutors to clarify the scope of any potential nuclear cooperation agreements, as well as provide "irreversible

and irrevocable guarantees” that any such agreements will be carried out.

What’s more, with more than 100 non-aligned nations recently backing Iran’s right to peaceful uses of nuclear power, an endorsement sought by Tehran in its standoff with the UN Security Council over its refusal to freeze uranium enrichment, Iran’s representative to the IAEA, Ali Ashgar Soltanieh said the endorsement from 115 countries present at the Tehran conference sends a “strong positive signal that the only way is negotiation and dialogue” over the nuclear standoff.⁶³ The Bush Administration too is weighing all options carefully in that there seems to be a shifting stance on its will to engage in dialogue with Tehran. Beginning 2003, the Bush Administration spurned the overtures of its allies and decided to remain on the sidelines when the EU-3 got involved in addressing and resolving the crisis by means of engagement and negotiations. However, later, Washington made a significant shift in policy when the Bush Administration agreed to join the EU-3 negotiations as an active participant. However, the present Republican Administration’s influence is waning now that George W. Bush is in the final months of his presidency. The onus henceforth would lie on the new incumbent of the White House pertaining to the future course of action on Tehran. If the US wants to steer Tehran towards abandoning its nuclear pursuit, then it is expected that Washington will get more directly drawn in the dialogue process with the Iranian establishment like it did in the case of North Korea.

Implications for India

The impact of Tehran’s nuclear programme did cause considerable strain in Indo-Iran ties when New Delhi cast its vote at the IAEA Board of Governors in 2005 in favour of a resolution finding Iran in “non-compliance with its safeguards obligations under the NPT” and expressing “the absence of confidence that Iran’s nuclear programme is entirely for peaceful purposes.” As a matter of fact, the stakes were high for New Delhi during the IAEA Board of Governors meeting, as it balanced a number of external pressures and internal debates over what its final decision would be regarding the referral of Iran to the Security Council. Its ultimate decision to vote for the resolution came as a surprise to many, underlining thereby, the growing influence of the burgeoning Indo-US ties, especially since the signing of the civilian nuclear agreement. Moreover, tensions over Washington’s pressure on New Delhi rose when US Ambassador to India, David Mulford, warned

India, in case it voted against sending the Iranian issue to the Security Council, about the future of the landmark nuclear cooperation pact. However, India primarily was swayed by the solidarity of the P-5 on the issue—the rare consensus between the P-5 significantly impacting India’s decision.

Subsequently, Tehran was incensed by India’s vote against it at the IAEA and outlined that American pressure on India against Iran was indeed playing a critical role. Moreover, the findings are placed under Articles XII and III of the IAEA Statute, both of which mandate referral of the matter to the Security Council and hold out a thinly veiled threat of sanctions and other punitive measures. Reacting sharply to New Delhi’s vote, Tehran threatened to reconsider its economic cooperation with India in September 2005. Later, Iranian President Mahmoud Ahmadinejad’s first official visit to India in April 2008 came at an opportune time for both nations since the past months were not exactly smooth vis-à-vis bilateral ties between Tehran and New Delhi on the diplomatic front. Keeping in view all these developments in the past, India perceived President Ahmadinejad’s visit as an opportunity to iron out these differences with Iran. Ahmadinejad’s visit was viewed through the prism of intensifying ties between India and Iran by means of deliberations in numerous key sectors ranging from energy, the Iran-Pakistan-India gas pipeline project, talks on the two multi-billion dollar energy deals and bilateral investments. However, the visit was shrouded in controversy, with Washington, apparently uneasy about the India-Iran ties, keeping a close tab on the Iranian president’s movement in South Asia. The sentiment was deftly reflected in the statement made by US State Department Deputy Spokesman Tom Casey when he said, “New Delhi should urge Iran to curtail its nuclear programme and to cease enriching uranium. India should also put pressure on Iran to become a more responsible actor on the world stage and ask Iran to end its rather unhelpful activities with respect to Iraq,” a statement where Casey apparently was pointing at Tehran’s support for promoting terrorism in Iraq. The American statement received flak by the Ministry of Foreign Affairs in New Delhi, and it released a statement strongly rebuking Washington, stressing, “India and Iran are ancient civilisations whose relations span centuries. Both nations are perfectly capable of managing all aspects of their relationship with the appropriate degree of care and attention and neither country needs any guidance on the

future conduct of bilateral relations,”⁶⁴ indicating that Ahmadinejad’s trip had flashed diplomatic barbs between New Delhi and Washington.

Moreover, India, on its part, has ever mounting demands for energy, in that it imports more than 70 per cent of its energy needs and desperately searches for energy partners to secure new supplies of oil and gas from abroad besides ramping up domestic production to sustain its booming economic growth. New Delhi deems Tehran, which has the world’s second largest known oil and gas reserves after Russia, to be a long-term energy partner. Besides, New Delhi intends to revive a 2005 agreement aimed at importing 5 million tonnes of liquefied natural gas (LNG) from Iran that never got implemented to start with, owing to the dramatically rising price of oil soon after. Indeed, President Ahmadinejad’s visit acted as a catalyst in enhancing ties between the two nations, particularly in the energy sector. The political spectrum within India would ideally want to strike a midway between keeping ties with both Washington and Tehran since the Muslim vote bank politics might figure as a key driver while formulating policies. Clearly, in its dealings with Tehran, India is required to balance a tight-rope as it tackles the conflicting imperatives of domestic politics and strategic interests skillfully matching them.

Significantly, a testament to this quandary that New Delhi seems to be caught in came with the signing of the Indo-US nuclear cooperation agreement into law as it received speedy criticism from the Islamic Republic of Iran when it warned that the Indo-US nuclear deal had “endangered” the NPT and is likely to trigger a “new crisis” for the international community. According to Deputy Head of Iran’s Atomic Energy Organisation, Mohammad Saeedi, “The method used by several nuclear states to transfer the technology to non-members of the NPT, will create new crises for the international community. Cooperation in the area of transfer of nuclear technology to the NPT non-members will endanger the treaty.”⁶⁵ The statement by Tehran could be viewed in the backdrop of a comment made earlier by Prime Minister Manmohan Singh at a Press conference following the India-EU Summit at Marseilles in October 2008, that India would oppose acquisition of nuclear weapons by Iran. The Indian position is owing to Iran being a signatory to the NPT and legally, therefore, has to abide by its obligations, which require it to abjure a nuclear weapons programme.

Understandably, India appears to be in a dilemma over the US-Iran conflict where spiralling Indo-US ties make it imperative for New Delhi to balance its relations with Washington, and a galloping economy pushing it towards forging close collaboration with Tehran. Notwithstanding the growing American pressure, particularly after the signing of the India-US civilian nuclear energy cooperation agreement into law, strong domestic constraints still loom large and prevent India from marginalising its ties with Iran. In my view, New Delhi should maintain an independent line while strategising its foreign policy sans any threads binding the same. At the same time, India could volunteer to act as a mediator between Washington and Tehran so as to resolve this interminable impasse.

Conclusion

Perceptibly, the most workable option to deal with Iran at this point in time would be to make efforts at a negotiated solution. Tehran would want to secure massive economic and security guarantees to further open its nuclear programme to rigorous, on-demand international inspections to guarantee that there is no diversion of nuclear material from peaceful purposes to building weapons. Given all the above realities, it is understandable that the Iranian nuclear issue would be contested hotly between the European and Asian capitals and Washington. Iran labels its atomic drive as peaceful and claims that the purpose of its nuclear programme is energy and that any other use would be a violation of the NPT of which it is a signatory, as well as being against Iranian religious principles. Tehran goes on to claim that nuclear power is necessary for a booming population and a rapidly industrialising nation and repeatedly points to the fact that Iran's population has more than doubled in twenty years and the country regularly imports gasoline and electricity. On the contrary, Washington vehemently argues that the discovery of the nuclear plants at Natanz and Arak has indeed raised qualms that Tehran has been working toward crafting a complete fuel cycle that would produce highly enriched uranium and plutonium in violation of its obligations to the NPT.

Iran has expressed a willingness to implement an Additional Protocol, though "voluntarily," and does not state that it would ratify the protocol—another Security Council demand. However, according to Iranian legislator, Hojjatollah Falahatpisheh, if Iran's nuclear case can be taken back to the IAEA from the Security Council, the *Majlis* in Tehran would ratify the Additional

Protocol.⁶⁶ The available information on Iran's nuclear programme elucidates that Iran has been seeking to develop all elements of the nuclear fuel cycle, although its progress in different areas cannot be empirically determined unless Tehran fully complies with IAEA norms, thus, intensifying the need for Iran to resume its adherence to the Additional Protocol. The towering stakes attached to this issue make it lucid that the coming time period would be extremely crucial vis-à-vis providing a breakthrough towards yielding tangible results since both sides remain equally firm on their stated positions.

Notes

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13. *Public Papers of the Presidents: Richard Nixon, 1969*, American Information Resource Center, pp. 544- 48.
14. For details, see *Tehran Magazine*, March 18, 1974, p. 2, cited in Sahimi, "Iran's Nuclear Energy Program," p. 2.
15. "Iran: Atomic Energy Program," United States Energy Research and Development Administration, October 1976, p. 3.
16. Negotiations of the NPT evolved gradually from the prolonged and unsuccessful negotiations on the general and complete disarmament of the 1950s. Already in 1956, it was suggested that measures to prevent the spread of nuclear weapons could be made part of a wider disarmament package.
17. The agreement was signed by Secretary Henry Kissinger for the US and Finance Minister Houshang Ansari for Iran. For more details see, Sahimi, "Iran's Nuclear Energy Program," p. 4.
18. "US-Iran Nuclear Cooperation", National Security Decision Memorandum 292, National Security Council; *President Gerald R. Ford's Presidential Documents, Washington D.C., April 22, 1975, p. 1.*
19. Leonard S. Spector, *Going Nuclear: The Spread of Nuclear Weapons 1986-1987* (Cambridge, Mass.: Ballinger, 1987), p. 45.
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34. Article IV of the NPT states that nothing in this treaty shall be interpreted as affecting the inalienable right of all the parties to the treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination.
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40. IAEA Report by the Director General on the *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007) and 1803 (2008) in the Islamic Republic of Iran*, May 26, 2008, Austria, p. 2
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