

Full Length Research Paper

Which way to Tehran? Pre-emptive air strike, cumulative diplomacy, technical isolation and the Iranian nuclear crises

Henry U. Ufomba^{1*} and Robert O. Dode²

¹Department of Politics, International Relations and European Studies, Loughborough University, Leicestershire, LE11 3TU, United Kingdom.

²Department of Political Science and Public Administration, University of Uyo, Akwa Ibom State, Nigeria.

Accepted 12 April, 2010

The issue of nuclear proliferation and its impact on the security of humanity remains the critical focus of policies and scholarships on international security since the decade following World War II. Thus, it is within this context that the Iranian nuclear programme has received so much resistance by Washington despite the lack of proof that the former been a signatory of the non-proliferation treaty has a nuclear military agenda. While scholars and policymakers have called for a pre-emptive air strike to cripple the Iranian nuclear facilities, or at least a diplomatic headway, this paper takes a divergent path. Making a technical analysis of the Iranian nuclear programme, this paper concludes that the crisis can best be solved through what it refers to as ‘technical isolation’.

Key words: Technical isolation, preemptive air strike, cumulative diplomacy, nuclear technology, WMD.

INTRODUCTION

Some countries, including Iran, under the auspices of the NPT hoped to partake of the yellow cake which had provided the population and industries of North America, Western Europe and Russia with dependable and cheap energy in the decades following World War II.

Apart from the nationalization of oil industry under Mohammed Mossadegh in the 1950s, Iran's nuclear programme which dates back to its purchase of a research reactor from the United States in 1959 under Shah Mohammed Pahlavi appears to be the most astonishing move in the Arab states to satisfy energy demands from a non-oil source (Ufomba, 2008:215-216). Following Albert Einstein's proposed formulae $E = MC^2$ and the resultant destruction of Hiroshima and Nagasaki, human existence on earth has been faced with the fear of a possible nuclear annihilation. The destructive characteristic of nuclear technology meant that despite its peaceful use, a nation that wants to acquire nuclear

energy must do so within a given legal framework that ensures that it is not diverted for military purposes. It is within this context that the Non-Proliferation Treaty (NPT) was signed in 1968 with the purpose of a nuclear weapon-free globe. The main aim of the NPT is that states with nuclear weapon before 1968 should pursue a disarmament programme while those without it must stay out of it. The disintegration of the Soviet Union in the late 1980s led to the scramble for 'left-over' Soviet nuclear technology, a situation that almost led to the 'nuclearization' of central Asia, the Far East and the Middle East. This scramble is not surprising, as hitherto developing nations with their energy deficiency raced to partake of the yellow cake that have fed the industries and homes of North America, Western Europe and Russia with cheap and reliable power supply; among these nations is Iran.

Iran is among the original signatories of the NPT in 1968. On this note, Iran planned to construct 23 nuclear power stations with American assistance by the year 2000 under the supervision of the international atomic energy agency (IAEA). This is based on the guidelines enshrined in the Article IV of the NPT which stated that

*Corresponding author. E-mail: ufomba@gmail.com,
h.ufomba@lboro.ac.uk.

'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...all the parties to the treaty undertake to facilitate, and have the right to participate in the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy'.

Following the establishment of a civil nuclear co-operation program under the U.S. Atoms for Peace program in 1967, the Tehran Nuclear Research Centre (TNRC) was established and ran by the Atomic Energy Organization of Iran (AEOI). The TNRC was equipped with a U.S. supplied, 5-megawatt nuclear research reactor, which became operational in 1967 and was fuelled by highly enriched uranium. This co-operation received a major boost when President Gerald Ford of the United States signed a directive in 1976 offering Tehran the chance to buy and operate a U.S.-built reprocessing facility for extracting plutonium from nuclear reactor fuel. The deal was for a complete 'nuclear fuel cycle'.

On this impetus, Iran signed a contract worth between \$4 and \$6 billion with a German firm, Kraftwerk Union AG, the joint venture of Siemens AG and AEG Telefunken in 1975 to build two 1200 Megawatts nuclear reactors at the city of Bushehr, Halileh, to supply electricity to the city of Shiraz and its environs when completed in 1985. While Kraftwerk Union AG was contracted to build these pressurized water reactor nuclear power plants, construction of the two 1,196 MWe nuclear generating units was subcontracted to ThyssenKrupp, and was to be completed in 1981. The two Bushehr reactors are part of Iran's ambition to build seven reactors by 2011, which will collectively generate 7000 Megawatts of electricity. Kraftwerk Union fully withdrew from the Bushehr nuclear project in July 1979, after work stopped in January 1979, with one reactor 50% complete, and the other reactor 85% complete. It claimed that its action was based on Iran's non-payment of \$450 million in overdue payments. The company had received \$2.5 billion of the total contract. Its cancellation came after certainty that the Iranian government would unilaterally terminate the contract themselves, following the revolution, which paralyzed Iran's economy and led to a crisis in Iran's relations with the West. The French company Framatome, a subsidiary of Areva, also withdrew itself. In 1984, Kraftwerk Union did a preliminary assessment to see if it could resume work on the project, but declined to do so while the Iran-Iraq War continued. The Bushehr reactors were damaged by multiple Iraqi air strikes between March 24, 1984 and 1988, and work on the nuclear program came to a standstill.

After the war, Iran from the 1990s began to look outward for nuclear technology acquisition. Despite the drawbacks caused by Argentine's cancelation of delivery to Iran, a civilian nuclear equipment worth \$18 million in

1992. In 1995, the largely devastated Bushehr reactors received a major boost when Iran signed a contract with Russia to resume work on the partially completed Bushehr plant, installing into the existing Bushehr 1 building a 915MWe VVER-1000 pressurized water reactor on or before March 2004. Nonetheless, there were no plans to complete the Bushehr 2 reactor.

In 1996, Washington convinced the People's Republic of China to pull out of a contract to construct a uranium conversion plant in Iran. Russia too was pressured to delay delivery of the 915MWe VVER-1000 pressurized water reactor by Washington on the grounds that Iran had violated its safeguard agreements with the IAEA, a major requirement in the NPT by failing to report some of its enrichment activities. The major activities by Iran which Washington claimed violated the safeguard agreements include:

1. Production of uranium dioxide at the Esfahan nuclear technology centre (ENTC), which was later, irradiated in the Tehran research reactor (TRR), and then processed in hot cells to separate the plutonium.
2. Importation of uranium metal for use in laser enrichment.
3. Production of uranium dioxide, uranium hexafluoride and a number of other uranium compounds using imported uranium dioxide.
4. Importation of uranium hexafluoride gas to test gas centrifuges at the Kalaye electric company, thereby producing some enriched Uranium.

Following sanctions and the direct threat by Washington to use nuclear pre-emptive air strike against Iran following its refusal to meet Washington's demands to give up its enrichment programme altogether, the question of the feasibility of a pre-emptive airstrike, its scope and casualty rationality and the best possible solution remains a critical focus in peace and security studies literature. To make a better policy recommendation, it is imperative to make a technical analysis of Iranian nuclear facilities and its legality. Then, we will assess the political situation in Iran, from which we will attempt to derive the best crises solution (BSC).

THE IRANIAN NUCLEAR PROGRAMME: A TECHNICAL EVALUATION OF THE FACILITIES AND THEIR CAPABILITIES

The Arak heavy water reactor (The IR-40)

As a compliment to the 35 years old outdated Tehran Research Reactor, the Iranian government decided to construct natural uranium fuelled 40-megawatt thermal heavy water reactor, the IR-40 at Arak. Expected to be in operation by the year 2011, the main function of the IR-40 is the production of radioactive isotopes for medical and industrial uses. Cooled by heavy water, the IR-40 will

require at least 85 tonnes of heavy water for the first two years of its operation. Afterwards, less than a ton will be required annually.

The natural uranium for fuel is planned to be sourced from the uranium dioxide elements in the fuel manufacturing plant at the Esfahan establishment.

The Iranian government planned to feed the IR-40 and it required heavy water partly from the heavy water Khondab Plant, near Arak. This plant produces 8 tonnes of heavy water per year. A similar plant is currently under construction near the Khondab Plant. Collectively, these two plants will produce 15 to 17 tonnes of heavy water per year. The capability of the Arak IR-40 heavy water reactor, if diverted for military use at full operation is two atomic bombs per year. The IR-40 is estimated to produce 8 kg of plutonium annually, but this can only be available between the year 2012 and 2015 if allowed to function without hindrances.

The Bushehr nuclear power reactor

In 1975, Iran signed a contract worth between \$4 to \$6 billion with a German firm, Kraftwerk Union AG, to build two 1200 Megawatts nuclear reactors at the city of Bushehr to supply electricity to the city of Shiraz and its environs when completed in 1985. While Kraftwerk Union AG was contracted to build these pressurized water reactor nuclear power plants, construction of the two 1,196 MWe nuclear generating units was subcontracted to ThyssenKrupp, and was to be completed in 1981. The two Bushehr reactors are part of Iran's ambition to build seven reactors by 2011, which will collectively generate 7000 Megawatts of electricity.

After been extensively damaged by Iraqi air strikes between March 24, 1984 and 1988, the Bushehr project received a major boost (despite it been abandoned by Kraftwerk Union in January 1979) following the completion by Russia of the 1000 megawatt electrical light-water reactor of the Russian VVER type in Bushehr, Halileh. This reactor was estimated to be operational in September 2007 using essentially low enriched uranium (about 3.5% in uranium-235) as fuel, which will be delivered from Russia (Barnaby, 2007). Altogether, Iran intends to build five more of these reactors, which will collectively generate 6000 megawatts of electricity.

Operationally, the core of the Bushehr nuclear plant reactor is constructed to hold about 103 tonnes of uranium contained in 193 assemblies. Four of these assemblies have the capability to produce enough plutonium to build a nuclear bomb within one year of full-fledged operation (Ufomba, 2008).

The military value of the Bushehr project if completed and in full-fledged operation has been estimated. Collectively, these six reactors are capable of producing annually about 1.5 tonnes of Plutonium, enough to build about 280 to 300 nuclear bombs.

The Esfahan establishment

The Esfahan establishment and its attached facilities are intended by the Iranian authorities to be what we choose to refer to as the "fuel-line" of the nuclear programme. The establishment is mainly a uranium conversion facility (UCF), which converts yellowcake to uranium dioxide (UO₂), which is then converted to enrichment-grade uranium hexafluoride gas at the Natanz facility. At the UCF, other uranium compounds are produced including UO₂ and metallic uranium, which is a catalyst and fuel in a nuclear enrichment circle.

Five kilometres from Esfahan, there is also a Zirconium production plant, which manufactures ingredients and alloys for nuclear reactors. Apart from the fuel manufacturing facility, Esfahan is a host to three small research reactors, which were supplied by China at the Esfahan Nuclear Technology Centre. One of the reactors is a 30 kW research facility that has been operational since 1994, while the other two are sub-critical assemblies operational since 1992 for training nuclear physicists and technicians (Barnaby, 2007; Livingstone, 2003; Orlinson and Gibby, 1998).

Ardekan nuclear fuel unit

In Ardekan near Yazd, the Iranian authorities built the Ardekan Nuclear Fuel Unit. The Ardekan Nuclear Fuel Unit is extensively a fuel production facility. It converts the indigenous uranium mined at Saghand 200 Km (120 Miles) from Yazd into yellowcake (U₃O₈). The yellowcake is transferred to Esfahan for conversion into uranium dioxide (UO₂).

The Saghand mine

The Saghand uranium ore deposit is located 200 Km (120 miles) from Yazd. Mined from a depth of 350 m (1160 feet), the deposit spreads over an area of about 130 km². This deposit contains reserves of about 5000 tonnes of uranium. This mine is the major source of indigenous uranium for the Iranian nuclear programme (Figure 1).

The Natanz uranium enrichment facility

The Iranian authority in June 2003 started a Pilot Fuel Enrichment Plant (PFEP) in Natanz, 42 km from Kashan. When completed, the facility will contain 1000 gas centrifuges. Though the PFEP was shut down in December 2003, Iran resumed enrichment related activities in February 2006, which included the testing of 10-centrifuge cascade with uranium hexafluoride, and small enrichment of uranium under the supervision of the

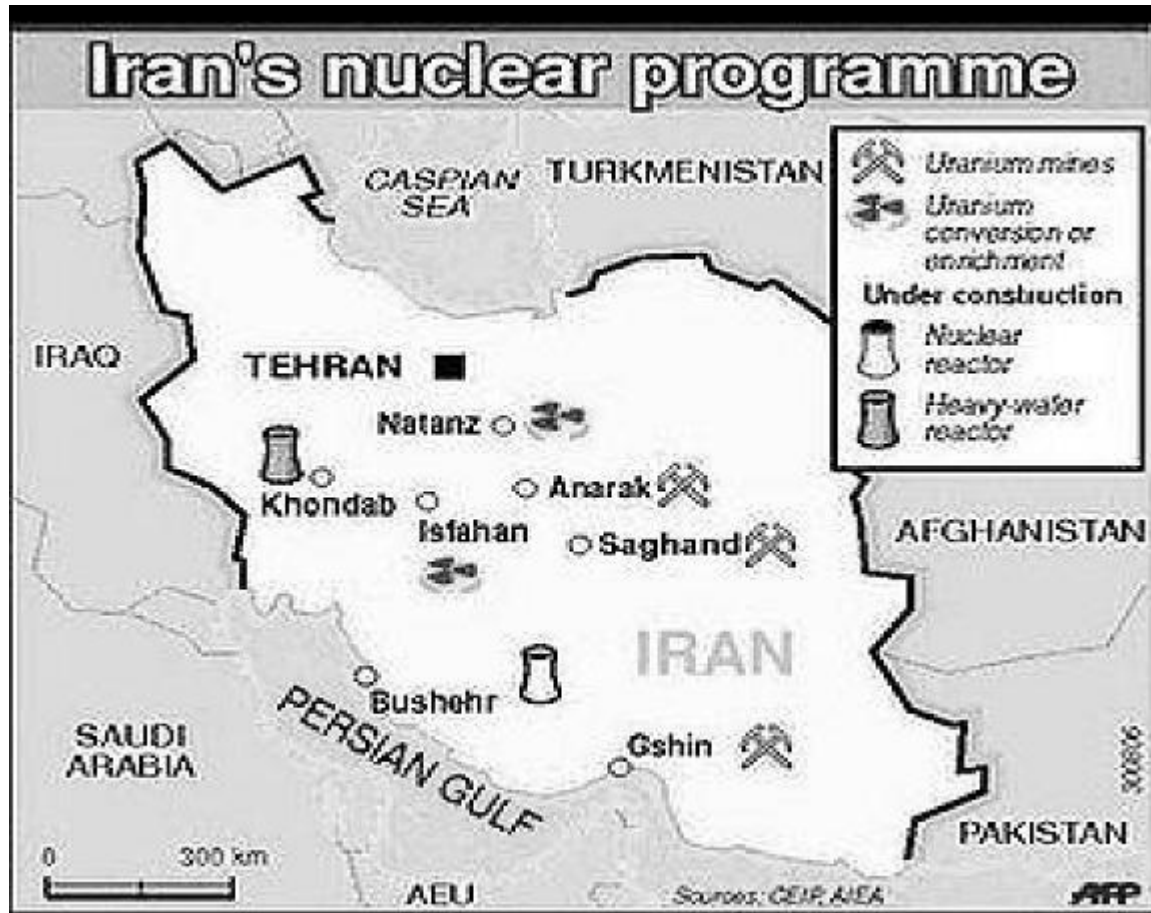


Figure 1. Iran's nuclear programme.
Source: AFP.

IAEA. On the 11th of April 2006, top Iranian officials acknowledged that uranium had been enriched at Natanz to a concentration of 3.5% in uranium 235 in a cascade of 164 gas centrifuges.

The Natanz Uranium enrichment facility is to accommodate also a commercial-scale fuel enrichment plant (cs-FEP) which is been constructed 60% underground, and is planned to contain more than 50000 centrifuges. If the 50000 gas centrifuges are eventually installed at the cs-FEP, it has the capability of producing 125,000 SWU per year using the P-1 centrifuges.

The military worth of the activities in Natanz is about 670 kg of highly enriched uranium (HEU) yearly. With expertise in HEU-based nuclear weapon fabrication, Iran can build 34 atomic bombs.

The Lashkar Ab'ad Laser isotope separation plant and the centre for agriculture research and nuclear medicine

In 2000, a pilot plant for laser isotope separation (LIS) was built at Lashkar Ab'ad. The LIS is relatively cheap to

operate and offers highly efficient uranium enrichment.

In Hashtgerd, Karaj, there is a centre for agriculture research and nuclear medicine, similar to the Bonab atomic energy research centre, a facility of research on the application of nuclear energy and technology on agricultural development.

UN SECURITY COUNCIL, TECHNICAL ISOLATION AND THE BEST WAY TO TEHRAN

Some renown experts, as well as a few countries involved in the crisis, have been considering allowing permanent R&D uranium enrichment on the Iranian soil because it not only conforms to the NPT, but also because it may be the only way out of the deadlock. This is not correct. First, if Iran can muster 12 centrifuges, it will eventually be able to muster 50,000 since there is no real technology threshold.

Second, contrary to what Tehran claims, there is no right to enrich uranium under the NPT. The treaty only refers to the inalienable right to develop pacific uses of nuclear energy (Article IV). Third, this right is anyhow

conditional to the respect of non-proliferation concerns (Article II). Those concerns have not been met according to numerous IAEA and UNSC resolutions adopted during these last three years. Past activities including dual use issues (sources of contamination, historic of P1-P2 centrifuges and laser) as well as military concerns (uranium metal and means of delivery) remain unclear. The EU3/EU have been trying for the last 3 years to avoid referring Iran to the UNSC and possibly sanctioning it by asking Tehran to clarify uncertainties about what are supposed to be its exclusively peaceful activities while suspending fuel cycle activities and heavy water activities that do not make economic sense. Instead, Tehran breached the Paris Agreement, resumed conversion and undertook R&D enrichment and production of enriched uranium up to 3.5% with 164 centrifuges (April, 2006) while testing a second cascade with the intention to install 3000 centrifuges by March 2007. This does not build trust.

To be completely fair, Iran does not trust the international community either. However, the burden of proof is on Tehran for it has violated its international obligations. The IAEA has been unable to prove that the Iranian nuclear program is for civilian use only. Under the UNSC resolutions 1696 and 1737, it is for Tehran to bear the burden of proof. The matter has become political, given the fact that Tehran refused to comply with IAEA requests. This has increased UNSC credibility in the non-proliferation domain. With two UNSC resolutions against Tehran in 2006, a new dynamic has emerged. Proliferators are now aware that the UN is determined to play a major role in the fight against proliferation of WMD. Only the suspension of uranium enrichment, reprocessing and heavy water activities could lead to the suspension of the UNSC process.

It is time now to look beyond the negotiation process and beyond UN sanctions to see what the players best alternatives are if they decide to leave the table. There cannot be a diplomatic solution to this crisis at the current stage whether or not Iran conforms strictly to the NPT at this initial stage, as demanded by the EU3 and the UNSC, is currently not the issue from Washington's perspective. The issue is that, considering the tension that Iran as a nuclear power will create in the Persian Gulf, Israel security and the high possibility of Iran pursuing the status of a nuclear military power in the future, the United States neither has the political, economic and military luxury to allow a nuclear powered Iran in the Persian Gulf considering its threat to its hegemony and its allies, Israel inclusive. On one hand, Iran for the sake of national ego will not allow its long ambition of been a nuclear power house to be rolled off, a thing of pride to the Arab world at large. Iran, no doubt will maintain its stand, holding firm to Article IV of the NPT which technically make Article II quite inefficient. If cumulative diplomacy is pursued extensively, it can only breed tension, agreement withdrawals and revocations,

since Iran distrust both the United States and the acting mediator, the EU3. Washington, on the other hand, fears for security and political reasons the concept of a 'nuclearized' Iran, and as such will remain unflinching in its 'no-enrichment-for-Iran' stand. As it currently stands, the burden of proof is on Iran to show beyond all reasonable doubt that its programme is for civil purpose. Iran can never sufficiently satisfy Washington's demand so long as it insists on enrichment in its soil. Washington on the other hand does not have the power extravagancy to halt enrichment on Iranian soil. But Iran's refusal to accept the no-enrichment alternatives and Article II of the NPT provides the U.S with the leverage to invoke the UNSC for a military offensive if the negotiations and counter-negotiations with its tension drags for too long.

On the other hand, it is a blunder if Washington initiates a pre-emptive air strike against Iran. The reasons are firstly, an attacked Iran may withdraw from the NPT and pursue a crash nuclear programme on the grounds of security of territorial integrity. The result would be devastating to the already overstretched U.S armed forces, worsen the current global financial meltdown and heighten the possibility of regional collapse in the already volatile Persian Gulf and a possible Third World War which may be nuclear in its character. Secondly, unlike the Israeli adventure in Osirak in 1981, the target scope of an aerial attack on Iranian nuclear programme is too large, as facilities are scattered all over Iran, thus, limiting the feasibility of a one-time tactical airstrike. Thirdly, due to its role in the Middle East, an attack on Iran is likely to cause disturbances in Iraq, Syria, and Lebanon, and may aggravate a united Arab front with stronger anti-American and anti-Israeli ideology. Fourthly, most of Iranian nuclear facilities are situated in densely populated areas and are built 50% underground with concrete materials. This means any attack short of a nuclear one will fail to damage the facilities extensively, while a nuclear option will create a Nagasaki and Hiroshima situation in the Middle East with great civilian casualties. Lastly, if a pre-emptive air strike is carried out after the construction and fuelling of Iranian nuclear reactors (like the one in Bushehr), a successful attack would contaminate the region with radioactive materials, with an impact more devastating than the Chernobyl case.

The failure possibilities of cumulative diplomacy and pre-emptive air strike brings into surface the question: How can the global community solve the Iranian nuclear crises without setting the Middle East on fire, and without the United States unilaterally rewriting the NPT by setting a precedence that technically closes membership to the nuclear club to currently non-nuclear countries? The solution to this puzzle lies within the borders of Iran itself. Iran's move to enrich Uranium from its Saghand mine has a problem, the uranium contains a large amount of molybdenum and other heavy metals. Ufomba (2008) has observed elsewhere that these particles during enrichment condenses and form particles, which are

likely to block the valves of a 20% in uranium-235. 20% in Uranium-235 is sufficient for a civil nuclear programme, but for military use, the contaminants must be removed and Iran currently does not have the nuclear knowledge to do so if it chooses to and must depend on technical assistance from Russia, China, Pakistan, North Korea or any of its allies. Apart from the contaminants, Iran cannot produce locally sufficient centrifuges for its nuclear facilities. A facility like the one at Natanz will require about 5,000 centrifuges, while 60% of the centrifuges fabricated locally by Iran have to be rejected as sub-standard (Barnaby, 2007). Moreover, gas centrifuges breakdown frequently due largely to mechanical pressure, and Iran would need to secure access to a steady supply of replacement machines.

Solving the Iranian nuclear crises without a military attack or affecting Iran's right within the NPT will require taking advantage of the programme's weaknesses through a process we term 'Technical isolation'. Technical isolation entails closing the 'nuclear knowledge door' against Iran. The UNSC under the auspices of the United States, EU3, Russia and China should place Iran on a nuclear embargo. This means that no country, organization or individual should directly or indirectly provide Iran with access to any nuclear material or knowledge, while those that have already done so must withdraw all existing human and material resources previously provided to Iran; hence isolating Iran technically.

POLICY IMPACT: CONCLUSION

This paper disagrees that the proponents of pre-emptive air strike and diplomacy are solutions to the Iranian nuclear crises and proposed what the authors refer to as 'technical isolation'. Through technical isolation, it is reasonable to assume that Iran will not develop more than its current stage in the next ten years without material and information leakages to it. The reason is that, without foreign expertise and material support, Iran nuclear programme will stagnate and wither because it does not have the material and technical capability of an independent nuclear power despite the fact that it has indigenous reserves of uranium.

In application, technical isolation would involve an embargo on the transfer of nuclear related technology in any form, whether in fuel materials or through technical assistance. To achieve this, the United States, Russia, China, Pakistan, North Korea, the EU3 and other interested parties would need to reach joint agreement to suspend completely all nuclear activities, materials and knowledge provided for Iran. This agreement will be enforced by the UNSC. Once technical isolation is observed, the pace of the Iranian nuclear programme will be stagnated. This strategy worked in Bushehr, when Washington pressured Russia to delay delivery to the reactor. It may replicate the result if applied on a broader

scale to encompass the entire Iranian nuclear programme.

Technical isolation will mean solving the Iranian nuclear crises without bombs and infringing on the right of Iran as provided in the NPT.

REFERENCES

- A Solution for the US–Iran Nuclear Standoff - The New York Review of Books" (2008). Nybooks.com. <http://www.nybooks.com/articles/21112>, 4: 55.
- Albright D (2006). "When could Iran get the Bomb" The Bulletin of Atomic Scientists pp. 28-33.
- Arak (2008) Globalsecurity.org, www.globalsecurity.org/wmd/world/iran/arak.html.
- Bahgat G (2006). "Nuclear proliferation: The Islamic Republic of Iran", Iranian Stud. J. 39: 3.
- Barnaby F (2007). "Would airstrike work? Understanding Iran's Programme and the Possible Consequences of a Military Strike" Oxford Research Group, www.oxfordresearchproject.org/publications/briefing/wouldairstrikeswork.pdf.
- Barnaby F (2006). "Iran's nuclear activities" Oxford Research Group, www.oxfordresearchgroup.org/publications/briefing/IranNuclearMar06.pdf.
- Broad W, Sanger D (2009). "Iran Has More Enriched Uranium Than Thought", New York Times, http://www.nytimes.com/2009/02/20/world/middleeast/20nuke.html?_r=1&scp=1&sq=iran%20uraniu m&st=cs.
- Bushehr A (2009). Background, Globalsecurity.org, www.globalsecurity.org/wmd/world/iran/bushehr/intro.htm.
- Cason M (1993). "Explosive Properties of Reactor-Grade Plutonium" Science and Global Security 4: 111-128.
- Dupre B (2007). "Iran Nuclear Crisis: The Right Approach" <http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=19002&prog=zgp&proj=znpp>, February 01.
- Fitzpatrick M (2006). "How close is Iran to building a Nuclear Weapon? And What can the U.S do to Stop It?" Prospect Magazine, www.prospectmagazine.co.uk/article_details.php?id=7488
- Gareth P (2008). "Documents linking Iran to nuclear weapons push may have been fabricated", The Raw Story p. 9.
- Gokay B (2006). "Déjà Vu: The Search for Weapons of Mass Destruction. This Time in Iran" <http://english.prada.ru/opinion/feedback/17-05-2006/80453-Iran-0>.
- Hibbs M (2003). "US in 1983 stopped IAEA from helping Iran make UF6" http://www.geocities.com/thelasian/nucleafuel_iran.html.
- Karl V (2006). "In Iran, Power Written in Stone". <http://www.washingtonpost.com/wp-dyn/content/article/2006/01/22/AR2006012200808.html>.
- Linzer D (2005). "Past Arguments Don't Square With Current Iran Policy". Washington Post. <http://www.washingtonpost.com/wp-dyn/articles/A3983-2005Mar26.html>.
- NPT/CONF.2000/28: Final Document of the 2000 Review Conference of the Parties to the Treaty of the Non-Proliferation of Nuclear Weapons 24 April - 19 May 2000, New York.
- Paul B (2006). "ISIS Imagery Brief: New Activities at the Esfahan and Natanz Nuclear Sites in Iran".
- Institute for Science and International Security (ISIS). <http://www.isis-online.org/publications/iran/newactivities.pdf>.
- Prather G (2005). "El-Baradei Isn't Perfect". <http://www.antiwar.com/prather/?articleid=8308>.
- Resolution GOV/2006/14 of the Board of Governors: Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran. <http://www.iaea.org/Publications/Documents/Board/2006/gov2006-14.pdf>.
- Rice C (2000). "Promoting the National Interest" Foreign Affairs 79: 1.
- Safdari C (2005). "Iran needs nuclear energy, not weapons". Le Monde diplomatique. http://72.14.209.104/search?q=cache:Wv7d_FdiMH0J:mondediplo.com/2005/11/02iran.

- Safdari C (2006). "Rhetoric of War: First Iraq, then Iran?" *Global Dialogue*, Winter-Spring 2006 8: 1-2.
- Stoiber C (2003). "The Evolution of NPT Review Conference Final Documents, 1975-2000" *Non-Proliferation Review*, Fall-Winter 2003 24: 126-166.
- Stoiber D (2003). "The Nth Country Experiment showed that Three post-docs with no nuclear knowledge could design a working atomic bomb" *The Bulletin of The Atomic Scientist* 59: 2.
- Traynor I "EU warns Iran: no talks if nuclear freeze ends ". *The Guardian*, <http://www.guardian.co.uk/eu/story/0,,1541352,00.html>.
- Ufomba H (2008). "Will Technical Isolation Work? A Proposed Solution To The Iranian Nuclear Programme" *South Afr. J. Int. Affairs* 15(2): 215-227.
- Wolfsthal J (1992). "Iran Hosts IAEA Mission; Syria Signs Safeguard Pact", *Arms Control Today*, March 22: 28.