## Note

# The Right of the Islamic Republic of Iran to Enrich Uranium

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## I. INTRODUCTION

The Islamic Republic of Iran (Iran) has been negotiating its nuclear program with the international community since 2002.[1] As a sovereign state, Iran insists on having a peaceful nuclear program.[2] Iran calls it an "inalienable" right.[3] The president of Iran, Hassan Rouhani, stated at a recent ceremony in Tehran that "[n]ot only nuclear energy, but also nuclear technology and even [uranium] enrichment are our inalienable rights . . . we have every right to progress and development."[4]

Certain members of the international community, including the United States of America, are suspicious of Iran's nuclear program and its final destination.[5] Iran is currently negotiating its nuclear program and intention to enrich uranium with the permanent members of the United Nations Security Council and Germany (P5+1 countries).[6] During these negotiations, the United States has taken the stance that there is no inherent

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1. *See IAEA and Iran: Chronology of Key Events*, IAEA, http://www.iaea.org/newscenter/focus/iran/chronology-of-key-events (last visited Sept. 20, 2015).

2. *See, e.g.*, Laura Smith-Spark, *Iran, World Powers Start Final Nuclear Talks Round Before Deadline*, CNN (July 3, 2014, 11:04 AM), http://www.cnn.com/2014/07/03/world/iran-nuclear-talks/.

3. *Rouhani Reaffirms Iran's Enrichment Right*, PRESSTV (Dec. 7, 2013, 9:45AM), http://www.presstv.com/detail/2013/12/07/338667/rouhani-reaffirms-iran-enrichment-right/.

4. *Id.* (second alteration in original).

5. *See Iran Nuclear Crisis: Can Talks Succeed?*, BBC, http://www.bbc.com/news/world-middle-east-11709428 (last visited Oct. 4, 2015).

6. *See* Amir Paivar, *Iran Nuclear Negotiations Go into Extra Time*, BBC, http://www.bbc.com/news/world-middle-east-29220200 (last visited Oct. 4, 2015).

right to enrich uranium for member states of the Treaty on the Non-Proliferation of Nuclear Weapons.[7] As Under Secretary of State Wendy Sherman stated in a Congressional hearing on October 3, 2013:

> It has always been the United States' position—and I have said to my Iranian interlocutors many times—is that article IV of the Nuclear Nonproliferation Treaty does not speak about the right of enrichment at all; does not speak to enrichment, period. It simply says that you have the right to research and development, and many countries, including countries like Japan and Germany, have taken that to be a right. But the United States does not take that position. We take the position that we look at each one of these [cases]. And more to the point, the UN Security Council resolution has suspended Iran's enrichment until they meet their international obligations. They did not say they have suspended their right to enrichment. They have suspended their enrichment. So we do not believe there is an inherent right by anyone to enrichment.[8]

The differing positions of states as members of the international community leads to a clear question of public international law—does a sovereign state that is a party to the Treaty on the Non-Proliferation of Nuclear Weapons have the right to enrich uranium?

This Note seeks to answer this question as applied to the Islamic Republic of Iran. First, this Note will present an introduction to the process of uranium enrichment. Then, it will introduce the framework of relevant international law. Finally, the analysis section of the Note will examine Iran's right to enrich uranium according to the current international law regime.

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7. *See Reversing Iran's Nuclear Program*: *Hearing Before the S. Comm. on Foreign Rel.*, 113th Cong. 19 (2013) (statement of Wendy Sherman, Under Sec. of State for Pol. Aff., Dep't of State).

8. *Id.*

## II. BACKGROUND

### A. URANIUM ENRICHMENT

Uranium is a rather heavy,[9] naturally occurring element.[10] Natural uranium atoms come with different masses,[11] and these different types of uranium atoms are called uranium isotopes.[12] Isotopes have similar chemical characteristics, but they differ in their physical properties.[13] Naturally occurring uranium contains 99.3% of the slightly heavier uranium, called U238, and around 0.7% of the slightly lighter uranium, U235.[14]

Uranium is a radioactive element,[15] and the atoms of the radioactive elements are also unstable.[16] Uranium atoms constantly and spontaneously decay through emission of sub-atomic particles or gamma rays.[17] Since uranium is unstable, it is a very good candidate to be broken down into lighter and more stable atoms. This process is crucial for our purposes because it can produce a massive amount of energy.[18] Fission is the scientific term of art that scientists use for this phenomenon. The United States Nuclear Regulatory Commission defines fission as "[t]he splitting of an atom, which releases a considerable amount of energy (usually in the form of heat) that can be used to produce electricity."[19] This energy is used in power plants to produce electricity and was also used in the atomic bombs that the United States dropped on Hiroshima and

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9. *What is Uranium? How Does it Work?*, WORLD NUCLEAR ASS'N, http://www.world-nuclear.org/info/Nuclear-Fuel-Cycle/Introduction/What-is-Uranium--How-Does-it-Work-/ (last visited Oct. 4, 2015).

10. *See Uranium*, ENCYCLOPEDIA EARTH, http://www.eoearth.org/view/article/156796/ (last visited Sept. 18, 2015).

11. *See generally id.* (explaining that uranium variations stem from the number of neutrons in the nucleus).

12. *See Isotope*, ENCYCLOPEDIA EARTH (July 11, 2007, 9:11 PM), http://www.eoearth.org/view/article/153924/.

13. *Id.*

14. *Uranium*, *supra* note 10.

15. *Id.*

16. *Id.*

17. *Radioactive Element*, FREE DICTIONARY, http://medical-dictionary.thefreedictionary.com/radioactive+element (last visited Sept. 20, 2015).

18. "The isotope U235 is important because under certain conditions it can readily be split, yielding a lot of energy." *See Uranium*, *supra* note 10.

19. *Fission (Fissioning)*, NUCLEAR REG. COMM'N, http://www.nrc.gov/reading-rm/basic-ref/glossary/fission-fissioning.html (last visited Oct. 4, 2015).

Nagasaki.[20] In this way, the same energy that can be used to produce electricity can also be used to cause a catastrophe.

The Commission states that "enriching uranium increases the proportion of uranium atoms that can be "split" by fission."[21] As previously mentioned, U235 accounts for around 0.7% of the uranium atoms in nature.[22] Enrichment is the process that increases the percentage of U235.[23] Since different isotopes are chemically similar, the only way to divide them—in the case of separating U235 from U238—is by the difference of their physical properties, mainly the difference in mass.[24]

Iran uses the gas centrifuge process to enrich uranium.[25] Through this process, uranium in the form of uranium hexafluoride (UF6) gas molecules is fed to interconnected centrifuge machines.[26] The Nuclear Regulatory Commission describes this technical and complicated procedure:

> In this process, UF6 gas is placed in a cylinder and rotated at a high speed. This rotation creates a strong centrifugal force so that the heavier gas molecules (containing U238) move toward the outside of the cylinder and the lighter gas molecules (containing U235) collect closer to the center. The stream that is slightly enriched in U235 is withdrawn and fed into the next higher stage, while the slightly depleted stream is recycled back into the next lower stage. Significantly more U235 enrichment can be obtained from a single-unit gas centrifuge than from a single-unit gaseous diffusion stage.[27]

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20. *See Hiroshima, Nagasaki, and Subsequent Weapons Testing*, WORLD NUCLEAR ASSOC., http://www.world-nuclear.org/info/Safety-and-Security/Radiation-and-Health/Hiroshima,-Nagasaki,-and-Subsequent-Weapons-Testing/ (last visited Oct. 4, 2015).

21. *Uranium Enrichment*, NUCLEAR REG. COMM., http://www.nrc.gov/materials/fuel-cycle-fac/ur-enrichment.html (last visited Oct. 2, 2015).

22. *See Uranium*, *supra* note 10.

23. *See What is Uranium? How Does it Work?*, *supra* note 9.

24. *Uranium Enrichment*, WORLD NUCLEAR ASS'N, http://www.world-nuclear.org/info/Nuclear-Fuel-Cycle/Conversion-Enrichment-and-Fabrication/Uranium-Enrichment/ (last visited Oct. 4, 2015).

25. *Id.* (stating that "Iran has sophisticated centrifuge technology").

26. *See, e.g.*, *Uranium Enrichment*, *supra* note 21.

27. *Id.*

B. SOVEREIGNTY

Sovereignty is defined as "supreme dominion, authority, or rule" and "the supreme political authority of an independent state."[28] Sovereignty may also be described as:

> The supreme, absolute, and uncontrollable power by which an independent state is governed and from which all specific political powers are derived; the intentional independence of a state, combined with the right and power of regulating its internal affairs without foreign interference. Sovereignty is the power of a state to do everything necessary to govern itself, such as making, executing, and applying laws; imposing and collecting taxes; making war and peace; and forming treaties or engaging in commerce with foreign nations.[29]

The legal definition of sovereignty is tied to the notion of a state. "Sovereignty is the power of a *state* to . . . govern itself."[30] Thus, to better understand the legal definition of sovereignty, one must observe the legal definition of 'state.' One definition finds that states are "entit[ies] that ha[ve] a defined territory and a permanent population, [that are] under the control of [their] own government, and that engage[] in, or ha[ve] the capacity to engage in, formal relations with other such entities."[31]

The combination of the definitions of state and sovereignty must conclude the definition of sovereign state:

> A sovereign state refers to a state that possesses full sovereignty over its affairs, existence, and territory. It is complete in itself. A sovereign state is recognized as being legitimate nation by the other major nations in the world. Major characteristics of a sovereign state are:
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> a. a defined territory on which the state exercises

28. *Sovereignty*, BLACK'S LAW DICTIONARY 665 (3d pocket ed. 2006).

29. *Sovereignty*, FREE DICTIONARY, http://legal-dictionary.thefree dictionary.com/sovereignty (last visited Sept. 20, 2015).

30. *Id.* (emphasis added).

31. *See* Klinghoffer v. S.N.C. Achille Lauro, 937 F.2d 44, 47 (2d Cir. 1991) (alteration in original) (quoting Nat'l Petrochemical Co. v. M/T Stolt Sheaf, 860 F.2d 551, 553 (2d Cir. 1988)).

internal and external sovereignty;
b. a permanent population;
c. a government, not under the control of a foreign power;
d. independence from other states and powers; and
e. the capacity to enter into relations with other sovereign states.[32]

Consistent with this definition, international scholars generally agree that four conditions comprise a sovereign state: (1) a defined territory; (2) permanent population; (3) an effective government; and (4) the capacity to enter into relations with other states.[33] Effective government means that the government is able to exercise control over its territory to the exclusion of other entities.[34]

### C. LIMITATIONS ON A SOVEREIGN STATE

Sovereignty is not without limitation. International legal customs and treaties are well-recognized as binding commitments, and may limit the behavior of sovereign states.[35] Besides the well-known sources of international law, new doctrines have appeared to impose more restrictions on a sovereign.

For instance, the notion of sovereignty fundamentally changed after World War II—one of "the most important outcomes of World War II was the general acceptance of the principle that States that act as aggressors abuse their sovereignty, and their leaders may be accountable directly to the international community. The establishment of this principle marked a revolutionary change in the scope of sovereignty."[36] Similarly:

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32. *Sovereign State Law & Legal Definition,* USLEGAL, http://definitions.uslegal.com/s/sovereign-state/ (last visited Sept. 27, 2015).

33. *See* SEAN D. MURPHY, PRINCIPLES OF INTERNATIONAL LAW 34 (2d ed. 2012).

34. *Id.* at 35.

35. *See* Statute of the International Court of Justice art. 38, June 26, 1945, 59 Stat. 1055, 33 U.N.T.S. 933 (explaining that the International Court of Justice may consider international custom to be evidence of a general practice accepted as law, and that this body may use such international custom when resolving disputes).

36. Winston P. Nagan & Craig Hammer, *The Changing Character of Sovereignty in International Law and International Relations,* 43 COLUM. J. TRANSNAT'L L. 141, 160 (2004).

> At the end of WWII, considerable disquiet was generated about the notion of the abuse of State sovereignty and the scale of the horror that it generated. The most important effort that clearly establishes limits to what government can do is reflected in the work of the Nuremburg Tribunal. In Nuremburg, the defense that the defendants were merely following the orders of the sovereign was rejected. The court stressed that behind the veil of the sovereign are the finite human agents of decision-making. A court of law could therefore penetrate the veil of the State and sovereign and hold the decision makers accountable. In historic terms, Nuremburg established a critical repudiation of the principle of sovereign absolutism. It, in effect, repudiated legal theories of sovereignty that sought to shield defendants from responsibility for mass murder.[37]

It is important to note, however, that according to the principles adopted by the United Nations Charter, restrictions upon the sovereignty of states could not be presumed.[38] The aforementioned limitation on sovereignty likely only applies when humanitarian principles are violated.[39]

The next pool of arguments that advocate for limitations gained potency in light of concerns regarding peace and security in the aftermath of the September 11, 2001 attacks.[40] When a powerful non-state actor takes refuge in a sovereign state and the sovereign state invokes the principle of sovereignty to bar the intervention of the targeted state, "[s]tates targeted by terrorist acts are reluctant to accept that their responses to such attacks are constrained by principles of sovereignty in international law."[41]

Many scholars also recognize the concept of "abuse of sovereignty."[42] As a result, sovereignty is not a license to kill, to make war, or threaten international peace.[43] International law recognizes sovereigns' rights, but it also constrains obligations

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37. Winston P. Nagan & Aitza M. *Haddad, Sovereignty in Theory and Practice*, 13 SAN DIEGO INT'L L.J. 429, 456 (2012).
38. Nagan & Hammer, *supra* note 36, at 154.
39. *See id.* at 160.
40. *See id.* at 170.
41. *Id.* at 170–71.
42. *See, e.g.*, *id.* at 176–77.
43. *Id.* at 177.

to a sovereign state.[44] Although this argument might have merit in some cases, it is hard to imagine that Iran's uranium enrichment program can be related to abuse of sovereignty in this sense—i.e., to provide a safe haven for non-state terrorist actors.

Setting aside the debatable legal doctrines for imposing limitations on the sovereignty of a state, Article 38(1) of the Statute of the International Court of Justice clearly outlines the relevant sources of international law:

> 1. The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:
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> a. international conventions, whether general or particular, establishing rules expressly recognized by the contesting states;
> b. international custom, as evidence of a general practice accepted as law;
> c. the general principles of law recognized by civilized nations;
> d. subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law.[45]

Article 38(1)(a) enshrines international conventions a source of international law, with subpart 38(1)(b) supplementing this list with customary international law. Thus, a sovereign state is subject to international custom and the international treaties it has signed. In effect, with every international convention that a sovereign state accepts, its sovereignty is likewise confined.

1. International Treaties

Iran is a member of the International Atomic Energy

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44. *Id.*

45. Statute of the International Court of Justice art. 38, June 26, 1945, 59 Stat. 1055, 33 U.N.T.S. 933.

Agency (IAEA),[46] which it joined in 1958.[47] Iran is also a signatory state of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).[48] Interpretation of international treaties is often controversial, and the Vienna Convention on the Law of Treaties aims to lessen this controversy. It prescribes that treaties shall be interpreted in good faith[49] and "in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose."[50] The Vienna Convention considers "[t]he context for the purpose of the interpretation" to be comprised of the text of the treaty, the preamble, and annexes.[51] The relevant treaties for the purposes of this Note are the Statute of IAEA and the NPT.

### *a. International Atomic Energy Agency*

The traumatic animosities of the Second World War and the dangers of new and powerful atomic technology pushed the international community to recognize the need for international collaboration through a supra-national organization that oversees use of atomic energy. The "genesis [of the IAEA] was President Eisenhower's address to the General Assembly of the United Nations on 8 December 1953."[52] These ideas helped to shape the IAEA Statute, which eighty-one nations unanimously approved in October 1956.[53]

Article III(A)(5) of the IAEA Statute authorizes it "[t]o establish and administer safeguards designed to ensure that special fissionable and other materials, services, equipment, facilities, and information made available by the Agency or at its request or under its supervision or control are not used in such a way as to further any military purpose."[54] Iran and the IAEA

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46. Int'l Atomic Energy Agency [IAEA], *The Members of the Agency*, at 1, IAEA Doc. INFCIRC/2/Rev.78 (Mar. 20, 2015).

47. *Id.* at 1.

48. *See* Treaty on the Non-Proliferation of Nuclear Weapons, *opened for signature* July 1, 1968, 21 U.S.T. 483, 729 U.N.T.S. 161 [hereinafter NPT].

49. Vienna Convention on the Law of Treaties art. 31, May 23, 1969, 1155 U.N.T.S. 331 [hereinafter Vienna Convention].

50. *Id.*

51. *Id.*

52. DAVID FISCHER, HISTORY OF THE INTERNATIONAL ATOMIC AGENCY: THE FIRST FORTY YEARS 1 (1997), http://www-pub.iaea.org/MTCD/publications/PDF/Pub1032_web.pdf.

53. *Id.*

54. Statute of the International Atomic Energy Agency art. III, *approved*

signed an agreement for the application of safeguards in connection with the NPT which came into force on May 15, 1974.[55]

Article 4 of this Safeguards Agreement specified the manner in which the agreement shall be implemented.[56] Two of its goals were "[t]o avoid hampering the economic and technological development of Iran or international co-operation in the field of peaceful nuclear activities" and "[t]o avoid undue interference in Iran's peaceful nuclear activities, and in particular in the operation of facilities."[57] Article 5 of the Safeguards Agreement requires the IAEA to protect Iran's commercial and industrial secrets and other confidential information.[58] Article 8 demands that the agency ask for only the "minimum amount of information and data" for its inspections,[59] and Article 9 requires the agency to "secure the consent of the Government of Iran to the designation" of its inspectors.[60] Article 7 provides the necessary regulatory requirements for the IAEA to implement its duties:

> (a) The Government of Iran shall establish and maintain a system of accounting for and control of all nuclear material subject to safeguards under this Agreement.
>
> (b) The Agency shall apply safeguards in such a manner as to enable it to verify, in ascertaining that there has been no diversion of nuclear material from peaceful uses to nuclear weapons or other nuclear explosive devices, findings of Iran's system. The Agency's verification shall include, inter alia, independent measurements and observations conducted by the Agency in accordance with the procedures specified in Part II of this Agreement. The Agency, in its verification, shall take due account of the

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Oct. 26, 1956, 81 U.S.T. 1093, 276 U.N.T.S. 3 [hereinafter IAEA Statute].

55. IAEA, *The Text of the Agreement Between Iran and the Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons*, IAEA Doc. INFCIRC/214 (Dec. 13, 1974) [hereinafter *Safeguards Agreement*].

56. *Id.* art. IV.

57. *Id.*

58. *Id.* art. V.

59. *Id.* art. VIII.

60. *Id.* art. IX.

technical effectiveness of Iran's system.[61]

Article XII(C) of the IAEA Statute empowers the Board of Governors of the IAEA to report a state's noncompliance with safeguards to "all members and to the Security Council and General Assembly of the United Nations."[62] The IAEA Board, in its 2005 resolution, found "that Iran's many failures and breaches of its obligations to comply with its NPT Safeguards Agreement, as detailed in GOV/2003/75, constitute noncompliance in the context of Article XII.C of the Agency's Statute."[63] The IAEA Board also found that Iran's nuclear program raised "questions that are within the competence of the Security Council, as the organ bearing the main responsibility for the maintenance of international peace and security."[64]

In 2006, the United Nations Security Council considered Iran's nuclear program for the first time[65] and demanded "that Iran shall suspend all enrichment-related and reprocessing activities, including research and development, to be verified by the IAEA."[66] The Security Council cautioned Iran that it would "adopt appropriate measures under Article 41 of Chapter VII of the Charter of the United Nations to persuade Iran to comply with this resolution and the requirements of the IAEA."[67] Article 41 of Chapter VII of the U.N. Charter reads:

> The Security Council may decide what measures not involving the use of armed force are to be employed to give effect to its decisions, and it may call upon the Members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.[68]

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61. *Id.* art. VII.

62. *See* IAEA Statute, *supra* note 54, art. XII.C.

63. IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, ¶ 1, IAEA Doc. GOV/2005/77 (Sept. 24, 2005) [hereinafter *Implementation Agreement 2005*].

64. *Id.* ¶ 2.

65. *See* S.C. Res. 1696 (July 31, 2006).

66. *Id.* ¶ 2.

67. *Id.* ¶ 8.

68. U.N. Charter art. XXXXI.

This provision empowers the Security Council to dictate to member states to "call upon the Members of the United Nations to apply such measures."[69] Since 2006, the Security Council has imposed four sanctions regimes on Iran. These measures have heavily restricted Iran's banking system, investments in or by Iran, Iranian aircraft or sea vessels, in- or out-bound cargo, and the sale of arms, as well as directly targeting individuals whom the Security Council considers to be key figures in Iran's nuclear program.[70]

*b. Treaty on the Non-Proliferation of Nuclear Weapons*

The NPT was designed to prevent the "wider dissemination of nuclear weapons," foster "peaceful applications of nuclear technology," and take "effective measures in the direction of nuclear disarmament."[71] It does so by imposing a system of safeguards on non-nuclear weapon state parties;[72] member states must accept "safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency."[73] Administering these safeguards is the responsibility of the IAEA,[74] which monitors the nuclear activities of NPT member states accordingly.[75] Iran is a member of the NPT[76] and concluded its Safeguards Agreement with the IAEA in 1974.[77]

The NPT divides countries into "nuclear-weapon States" and "non-nuclear-weapon States."[78] It then mandates that nuclear-weapon states:

> [n]ot to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or

69. *Id.*
70. *See* S.C. Res. 1737, ¶ 10 (Dec. 27, 2006).
71. NPT, *supra* note 48.
72. *Id.* art. III, ¶ 1.
73. *Id.*
74. *See Treaty on the Non-Proliferation of Nuclear Weapons,* IAEA, http://www.iaea.org/Publications/Documents/Treaties/npt.html (last visited Sept. 20, 2015) (providing a brief overview of the NPT and the IAEA's role in its implementation).
75. NPT, *supra* note 48, art. III, ¶ 1.
76. *See* NPT, *supra* note 48.
77. *Safeguards Agreement*, *supra* note 55.
78. NPT, *supra* note 48.

> indirectly; and not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.[79]

The NPT demands that non-nuclear-weapon states must not receive such weapons or nuclear explosive devices, nor control or assist in the manufacture of such weapons or nuclear explosive devices.[80]

Article III of the NPT states that "[t]he safeguards required by this Article shall be implemented in a manner designed to comply with Article IV of this Treaty, and to avoid hampering the economic or technological development of the Parties or international co-operation in the field of peaceful nuclear activities."[81] Article IV of the NPT states that "[n]othing 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 and in conformity with Articles I and II of this Treaty."[82]

Article III of the NPT also mentions that the materials are subject to the procedure for safeguards:

> [P]rocedures for the safeguards required by this Article shall be followed with respect to source or special fissionable material whether it is being produced, processed or used in any principal nuclear facility or is outside any such facility. The safeguards required by this Article shall be applied on all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere.[83]

According to Article III of the NPT, the safeguards "shall be applied on all source or special fissionable material."[84] Accordingly, centrifuges and other enrichment equipment fall

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79. *Id.* art. I.
80. *Id.* art. II.
81. *Id.* art. III, ¶ 3.
82. *Id.* art. IV.
83. *Id.* art. III, ¶ 1.
84. *Id.*

out of the scope of the NPT and its safeguards.

2. Regional Treaties

In addition to the NPT, Iran is subject to various regional treaties**.** In 1978, the Persian Gulf countries (Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates) signed the Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution[85] (Kuwait Convention). This regional convention broadly defines "marine pollution" as the "introduction by man, directly or indirectly, of substances or energy into the marine environment resulting or likely to result in such deleterious effects as harm to living resources, hazards to human health, hindrance to marine activities including fishing, impairment of quality for use of sea-water and reduction of amenities."[86] It further asks the parties to take all appropriate measures in accordance with the convention to prevent, abate, and combat pollution of the marine environment.[87]

One of Iran's key nuclear sites is Bushehr Nuclear Power Plant (BNPP).[88] Bushehr, the capital of Iran's Bushehr province, is a port city located south of Iran along the northern coast of the Persian Gulf.[89] "German firms started building the Bushehr plant in 1975, but work was halted in 1979 following the Iranian Revolution. In 1995, Iran and Russia signed a contract to finish the plant, although financial, technical and political problems led to further delays."[90] According to the IAEA's report on October 30, 2013, BNPP was operating at maximum nominal power in October 2013.[91] Countries along the Persian Gulf have

85. Kuwait Regional Convention for Cooperation on the Protection of the Marine Environment from Pollution, July 24, 1978, 1140 U.N.T.S. 133 [*hereinafter* Kuwait Convention].

86. *Id.* art. I, ¶ (a).

87. *Id.* art. III, ¶ (a).

88. *Bushehr Nuclear Power Plant*, NUCLEAR THREAT INITIATIVE, http://www.nti.org/facilities/184/ (last visited Sept. 27, 2015).

89. *Bushehr*, IRAN AIR, http://www.iranair.com/portal/Home (follow "Travel Information: Destinations" hyperlink; then follow "Domestic" hyperlink; then click "Bushehr") (last visited Sept. 27, 2015).

90. Rehab Abd Almohsen, *Earthquake Concerns over Iranian Nuclear Plan,* SCIDEV (June 17, 2013), http://www.scidev.net/global/nuclear/news/earthquake-concerns-over-iranian-nuclear-plant.html.

91. IAEA, *Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions in the Islamic Republic of Iran*, at 13, IAEA Doc. GOV/2013/56 (Nov. 13, 2013).

raised their concerns regarding the safety of BNPP. During a closed-door meeting of the Board of Governors of IAEA from June 3–7, 2013, both United Arab Emirates and Saudi Arabia voiced safety concerns.[92] They were concerned due to their geographical proximity to BNPP, which is closer to five Arab Persian Gulf capitals than it is to Iran's capital of Tehran.[93]

In accordance with the Kuwait Convention, the Persian Gulf states signed the Protocol for the Protection of the Marine Environment Against Pollution from Land Based Sources (the Protocol) in 1990.[94] This Protocol applies to discharges from land-based sources within the territories of the parties.[95] It requires the Persian Gulf countries to develop and implement source control programs.[96]

3. Customary International Law

The Restatement of Foreign Relations Law defines customary international law as law that "results from a general and consistent practice of states followed by them from a sense of legal obligation."[97] Based on this definition, customary international law exists when two key requirements are met: "(1) a relatively uniform and consistent state practice regarding a particular matter; and (2) a belief among states that such practice is legally compelled."[98] The uniformity and consistency of the practice must be evident over some extended period of time.[99] In addition, international law "rests upon principles of sovereignty and consent."[100] Generally, international law is comprised of rules that states have accepted via a treaty or

92. *Iran's Gulf Arab Neighbors Worried About Bushehr Reactor*, AL ARABIYA NEWS (June 6, 2013), http://english.alarabiya.net/en/News/middle-east/2013/06/06/Iran-s-Gulf-Arab-neighbors-worried-about-Bushehr-reactor.html.

93. *Id.*

94. Protocol for the Protection of the Marine Environment Against Pollution From Land-Based Sources, Feb. 21, 1990, http://www2.unitar.org/cwm/publications/cbl/synergy/pdf/cat3/UNEP_regional_seas/convention_kuwait/Protocols/protocol_prot_marine_env_against.pdf [hereinafter *Protocol*].

95. *Id.* art. III.

96. *Id.* art. IV, ¶ 1.

97. RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW § 102.2 (1987).

98. MURPHY, *supra* note 33, at 93.

99. *Id.*

100. *See* Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8).

otherwise.[101] Thus, states must have regarded their practice over an extended period of time as the law, if it is a binding international custom.[102]

Customary international law plays an important role when no treaty has been developed to govern a particular topic, when certain states are not parties, or when treaties are inadequate.[103] For example, when dealing with environmental concerns regarding nuclear activities, customary international law may apply limitations on a sovereign with respect to environmental concerns.[104]

Another source of environmental international law is the majority consensus of non-binding resolutions and recommendations of international organizations.[105] Some of the international environmental law principles, derived from non-binding resolutions and recommendations of international organizations, have not been practiced uniformly or consistently for a long enough period of time to be considered customary international law.[106] However, despite questions regarding the strength and authority of current international environmental principles, such principles are not completely void of legal importance.[107]

These principles, "which are neither strictly binding nor completely void of any legal significance,' but which in time may harden into customary international law," are referred to as a form of 'soft' international law.[108] "Soft law is a legal phenomenon in international law which refers to the non-binding international agreements or norms which have altered the process by which international law has developed over the past decade."[109] Two examples of international environmental law principles include the precautionary principles and the

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101. *Id.*

102. MURPHY, *supra* note 33, at 93–95.

103. MURPHY, *supra* note 3333, at 92.

104. *See, e.g.*, Trail Smelter Arbitration (U.S. v. Can.), 3 R.I.A.A. 1905 (1938) (holding the Canadian government must remedy harms caused to the state of Washington by transboundary air pollution from the operation of a smelting company in British Columbia).

105. MARK W. JANIS, AN INTRODUCTION TO INTERNATIONAL LAW 51–53 (4th ed. 2003)

106. *See id.*

107. *See id.*

108. *See id.*

109. *See* Jeffrey M. Pollock & Jonathan S. Jemison, *The Emerging of International Environmental Law*, N.J. LAW, Feb. 1999, at 25–28.

polluter pays principle.

The precautionary principle states not to postpone cost-effective measures to prevent potential environmental harm, where there is lack of scientific certainty of such harm but the potential damage is serious and irreversible.[110] This concept is embodied in the fifteenth principle of the Rio Declaration, stating "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."[111]

The polluter pays principle provides that the polluting state must pay the cost of remedying the harm caused by its pollution.[112] As provided in principle sixteen of the Rio Declaration, "national authorities should endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment."[113]

## III. IRAN'S RIGHT TO ENRICH URANIUM

The Islamic Republic of Iran has effective control over a territory of 1,648,195 square kilometers.[114] In this respect, it is the eighteenth largest territory in the world.[115] As of July 2014, its population was 80,840,713.[116] Iran—a recognized independent international state and United Nations member[117]—has ratified many international accords and treaties. In addition, Iran joined the IAEA in 1958[118] and is also

110. MURPHY, *supra* note 33, at 426.

111. U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, princ. 15, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), annex I (Aug. 12, 1991) [hereinafter *Rio Declaration*].

112. MURPHY, *supra* note 33, at 427.

113. *Rio Declaration*, *supra* note 111, princ. 16.

114. *See The World Fact Book: Iran*, CIA, https://www.cia.gov/library/publications/the-world-factbook/geos/ir.html (last visited Sept. 28, 2015).

115. *Id.*

116. *Id.*

117. *Member States of the United Nations*, U.N., http://www.un.org/en/members/ (last visited Sept. 28, 2015).

118. *See* IAEA, *supra* note 46.

a signatory state of the NPT.[119]

These facts emphasize that Iran fulfills all four requirements that international law requires as a sovereign state—defined territory, permanent population, effective government, and capacity to enter into relations with other states.[120] Iran's sovereignty is not in question—the question is whether Iran, as a sovereign state, has a right to enrich uranium within its territory.

This issue can be analyzed in two ways. First, whether Iran has the positive right to enrich uranium; and second, whether Iran is prohibited from enriching uranium. The key difference is in the presumption that each question embodies. The first question assumes that Iran needs permission to conduct internal affairs. The second question, however, presumes that Iran is inherently free to conduct an activity unless it is prohibited from doing so. Thus, the answer for the second question lies in whether Iran is prohibited from enriching uranium.

The International Court of Justice—in response to being asked by the U.N. General Assembly whether "the threat or use of nuclear weapons in any circumstances permitted under international law,"[121]—stated that the first viewpoint:

> [w]as incompatible with the very basis of international law, which rests upon the principles of sovereignty and consent; accordingly; and contrary to what is implied by use of the word 'permitted,' states are free to threaten or use nuclear weapons unless it can be shown that they are bound not to do so by reference to a prohibition in either treaty law or customary international law.[122]

This opinion emphasizes that "[i]nternational law rests on the principle of the sovereignty of states."[123] Restriction upon independent states cannot be presumed,[124] and "international law leaves to States 'a wide measure of discretion which is only

119. NPT, *supra* note 48.

120. MURPHY, *supra* note 33, at 34.

121. See Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, 238 (July 8).

122. *Id.*

123. MURPHY, *supra* note 33, at 13 (citation omitted).

124. *Legality of the Threat or Use of Nuclear Weapons*, 1996 I.C.J. at 238, ¶ 21 (citing The Case of the Lotus (Fr. v. Turk.), Judgment, 1927 P.C.I.J. (ser. A) No. 10, at 18 (Sept. 7, 1927)).

limited in certain cases by prohibitive rules.'"[125]

An advisory opinion of the International Court of Justice suggests that Iran, as a sovereign state, is free to enrich uranium unless a prohibition of such an activity is shown under international law.[126] Thus, Iran's right to enrich uranium is presumed unless proven otherwise. The following is a discussion of possible prohibitions that international treaties might impose on Iran's enrichment rights.

## A. INTERNATIONAL TREATIES

As a member of the IAEA and a signatory of the NPT, Iran must act within the limits imposed by these commitments.[127] Following Iran's commitment under Article III of the NPT,[128] a Safeguards Agreement was negotiated with the IAEA and implemented in 1974.[129] According to Article II of the NPT, Iran, as a non-nuclear party:

> [u]ndertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.[130]

Thus, Iran is bound not to manufacture nuclear weapons or other nuclear explosive devices. Article II of the NPT certainly constitutes a limitation on Iran's nuclear program.

Enriching uranium is the starting point for facilitating the use of nuclear energy, however.[131] This energy is employed in atomic weapons and power plants.[132] Although the enrichment process is a necessary step in the manufacture of nuclear energy,

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125. *Id.*
126. *Id.*
127. "Every treaty in force is binding upon the parties to it and must be performed by them in good faith." Vienna Convention, *supra* note 49, art. 26.
128. NPT, *supra* note 48, at art. III, ¶ 1.
129. *Safeguards Agreement*, *supra* note 55.
130. NPT, *supra* note 48, at art. II.
131. *See What is Uranium?*, *supra* note 9.
132. *See id.*

it does not have to correlate with manufacturing nuclear weapons.[133] For example, Germany—a member of the NPT—engages in uranium enrichment,[134] and yet is still classified as non-nuclear by the NPT.[135]

Article IV of the NPT declares that "[n]othing 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 and in conformity with Articles I and II of this Treaty."[136] According to the Vienna Convention, interpretation of a treaty should be contextual, and should include the preamble of the treaty.[137] The NPT's preamble states that parties express their support for "development and other efforts to further the application, within the framework of the IAEA safeguards system"[138] and affirms that the benefits of peaceful applications of nuclear technology, including any technological by-products which may be derived from development of nuclear explosive devices, should be available for peaceful purposes to all NPT parties.[139]

Considering the preamble and language of the treaty, even if Article IV does not embody the right of a party to enrich uranium for peaceful purposes, there is certainly no positive prohibition.

> Under Article IV of the NPT, all countries have a right to civilian nuclear programs as long as they do not attempt to produce weapons programs. Given such, a complete ban on the sale or spread of nuclear enrichment and processing materials is simply not a viable legal possibility . . . there is no means for a complete ban on the proliferation of nuclear technologies or dual-use [both peaceful and non-peaceful] technologies.[140]

In a multitude of reports and resolutions issued by the

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133. *See id.*

134. *Nuclear Power in Germany,* WORLD NUCLEAR ASSOC., http://www.world-nuclear.org/info/Country-Profiles/Countries-G-N/Germany/ (last updated Oct. 4, 2015).

135. *Id.*

136. NPT, *supra* note 48, art. IV, ¶ 1.

137. Vienna Convention, *supra* note 49, art. 31, ¶ 2.

138. NPT, *supra* note 48.

139. *Id.*

140. Kyle Mathis, *The Nuclear Supplier Group: Problems and Solutions*, 4 ALA. C.R. & C.L. L. REV. 169, 184 (2013).

Director General and Board of Governors of the IAEA, this agency accused Iran of failing to meet its obligations under the Safeguards Agreement.[141] These allegations began in 2003, noting that "Iran has failed to meet its obligations under its Safeguards Agreement"[142] and continued in the September 24, 2005 resolution of the Board of Governors, in which it found that Iran's failures constituted direct non-compliance with the NPT Safeguards Agreement.[143] This resolution further found that Iran's nuclear program raised "questions that are within the competence of the Security Council, as the organ bearing the main responsibility for the maintenance of international peace and security."[144] Among others, the IAEA has also accused Iran of non-collaboration, failure to report,[145] and a lack of candor in its communications.[146]

Iran has accused the IAEA of "poorly safeguarding inspection data and thus tacitly colluding with foreign intelligence agencies."[147] According to Article V of the Safeguards Agreement, the IAEA must protect Iran's commercial and industrial secrets as well as other confidential information.[148] Fereydoon Abbasi-Davani, the former head of the Atomic Energy Organization of Iran (AEOI), once said:

> [w]e do not say that international inspectors are spies, we do not say that the agency is connected to terrorists and saboteurs . . . what we are saying is that they do not keep data secure. Information on Iran is stored on sites that can be infiltrated by hackers in the West . . . .can it not be seen how our scientists are assassinated and our

141. *See, e.g.*, IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, at 7, ¶ 32, IAEA Doc. GOV/2003/40 (June 6, 2003) [hereinafter *Implementation Agreement: June 2003*]; *Implementation Agreement 2005*, *supra* note 63, at 2, ¶ 1.

142. *Implementation Agreement: June 2003*, *supra* note 141, at 7.

143. *Implementation Agreement 2005*, *supra* note 63, at 2, ¶ 1.

144. *Id.* at 2, ¶ 2.

145. IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, ¶¶ 25, 46, 48, IAEA Doc. GOV/2003/75 (Nov. 10, 2003) [hereinafter *Implementation Agreement*: *Nov. 2003*].

146. *Id.* ¶¶ 23, 32.

147. *See* Steven Ditto, *Iranian Suspicions about the IAEA*, WASHINGTON INST. (Mar. 21, 2014), http://www.washingtoninstitute.org/policy-analysis/view/iranian-suspicions-about-the-iaea.

148. *Safeguards Agreement*, *supra* note 55, art. 5, ¶ (a).

[nuclear] sites are sabotaged?[149]

The assassination and cyber-attacks that Iranian officials refer to are serious and real dangers. Iran has suffered cyber-attacks to its nuclear sites which may constitute "an [illegal] act of force."[150] At least five Iranian nuclear scientists have been murdered, most of them by bombs planted on their cars.[151] Iranian and international media have blamed these terrorist and cyber-attacks on Israel and the United States.[152]

The other concern regarding the safeguards agreement is its authority and realm of application. Although the IAEA has asked for Iranian cooperation "in order to restore international confidence in the exclusively peaceful nature of Iran's nuclear programme,"[153] Iran views many of the IAEA's requests as falling outside the scope of the requirements outlined by the safeguard agreements.[154]

The safeguards agreement has limited applications. According to Article III of the NPT, the safeguards apply only to "source or special fissionable material" and "all source or special fissionable material."[155] Article IV of the Safeguards Agreement provides that these must be implemented in a way "[t]o avoid hampering the economic and technological development of Iran or international co-operation in the field of peaceful nuclear

149. Ditto, *supra* note 147.

150. "The 2009 cyberattack by the U.S. and Israel that crippled Iran's nuclear program by sabotaging industrial equipment constituted 'an act of force' and was likely illegal under international law, according to a manual commissioned by NATO's cyber defense center in Estonia." *See* Shaun Waterman, *U.S.-Israeli Cyberattack on Iran was 'Act of Force,' NATO Study Found*, WASHINGTON TIMES (Mar. 24, 2013), http://www.washingtontimes.com/news/2013/mar/24/us-israeli-cyberattack-on-iran-was-act-of-force-na/?page=all.

151. "Although Israel has never acknowledged it, the country's famed espionage agency—the Mossad—ran an assassination campaign for several years aimed at Iran's top nuclear scientists." *See* Dan Raviv, *U.S. Pushing Israel to Stop Assassinating Iranian Nuclear Scientists*, CBS NEWS (Mar. 1, 2014), http://www.cbsnews.com/news/us-pushing-israel-to-stop-assassinating-iranian-nuclear-scientists/.

152. *See supra* notes 150–51 and accompanying text.

153. IAEA, *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council Resolutions in the Islamic Republic of Iran*, ¶ 5, IAEA Doc. GOV/2013/27 (May 22, 2013).

154. IAEA, *Communication Dated 1 March 2010 Received from the Permanent Mission of the Islamic Republic of Iran to the Agency Regarding the Implementation of Safeguards in Iran*, Special Remarks, Comment, ¶ 4, IAEA Doc. INFCIRC/786 (Mar. 2, 2010).

155. NPT, *supra* note 48, art. III, ¶ 2.

activities," and "[t]o avoid undue interference in Iran's peaceful nuclear activities, and in particular in the operation of facilities."[156] Article V also requires the IAEA to protect Iran's commercial and industrial secrets and other confidential information.[157] Similarly, Article VIII demands that the IAEA shall ask for only the "minimum" amount of information and data on its inspections.[158]

According to Iran, despite these restrictions, the IAEA requests information that goes beyond the agreements. Iran has sometimes cooperated with such requests, but it has never regarded such cooperation as an obligation.[159]

> Having considered that the Safeguards Agreement between the Agency and the Islamic Republic of Iran is governing the relation between the Agency and Iran it constitutes the legal basis for cooperation and the Agency's requests should be based on that agreement. Thus, it is not clear why the Agency's requests go[] beyond the Safeguards Agreement and even beyond the Additional Protocol, although the latter is not being implemented by Iran.[160]

Notwithstanding the objections that both parties had in regards to the implementation of the safeguard agreements, a September 2005 IAEA resolution found "that Iran's many failures and breaches of its obligations to comply with its NPT Safeguards Agreement, as detailed in GOV/2003/75, constitute[ed] non-compliance in the context of Article XII.C of the Agency's Statute."[161] Further, on February 4, 2006, another IAEA resolution requested that the Director General report to the Security Council that the Board had asked Iran to respond

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156. *Safeguards Agreement*, *supra* note 55, art. 4, at 2.

157. *Safeguards Agreement*, *supra* note 55, art. 5, at 2.

158. *Safeguards Agreement*, *supra* note 55, art. 8, at 3.

159. "Accordingly, the Agency's request to take DA samples from the heavy water stored at UCF has no justification referred to Iran's Safeguards Agreement (INFCIRC/214). However, the Agency inspectors were allowed to perform their attribute test in order to confirm that they are not nuclear materials." *See* IAEA, *Communication Dated 1 March 2010 Received from the Permanent Mission of the Islamic Republic of Iran to the Agency Regarding the Implementation of Safeguards in Iran*, Special Remarks, Comment, ¶ 5, IAEA Doc. INFCIRC/786 (Mar. 2, 2010).

160. *Id.* ¶ 4.

161. *Implementation Agreement 2005*, *supra* note 63, ¶ 1.

to outstanding questions related to its nuclear program.[162] Article XII(C), which empowers the Board of Governors of the IAEA to announce non-compliance, is worthy of a more detailed study. Its most relevant part reads:

> The inspectors shall report any non-compliance to the Director General who shall thereupon transmit the report to the Board of Governors. The Board shall call upon the recipient State or States to remedy forthwith any non-compliance which it finds to have occurred. The Board shall report the non-compliance to all members and to the Security Council and General Assembly of the United Nations.[163]

In Iran's case however, no report found Iran in noncompliance. Nevertheless, the Board of Governors, independently, found that "Iran's many failures and breaches of its obligations to comply with its NPT Safeguards Agreements, as detailed in GOV/2003/75, constitutes non-compliance in the context of Article XII(C) of the Agency's Statute."[164]

The Board of Governors' independent assessment, in which it found that Iran was non-compliant, is an extension of the Board's authority and has no clear basis in the Statute of the IAEA. This fact fundamentally undermines the legality of finding Iran in noncompliance and consequently conveying these findings to the Security Council. Before finding non-compliance, one of the Board of Governors' resolutions stated that "all the declared nuclear material in Iran has been accounted for, and that such material is not diverted to prohibited activities."[165] However, in a prior resolution, the Board noted, "the Agency is not yet in a position to conclude that there are no undeclared nuclear materials or activities in Iran."[166] Basically, there was no affirmative evidence of deviation to nuclear weapon manufacturing on the Iranian side. Instead, the issue was lack of certainty in the viewpoint of the IAEA concerning possible undeclared activity or material in Iran. That did not rise to the

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162. IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, ¶ 2, IAEA Doc. GOV/2006/14 (Feb. 4, 2006).

163. IAEA Statute, *supra* note 54, art. XII.C.

164. *Implementation Agreement 2005*, *supra* note 63, ¶ 1.

165. IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, ¶ (d), IAEA Doc. GOV/2004/90 (Sept. 29, 2004).

166. *Id.*

level of non-compliance, but yet the Board of Governors enthusiastically found Iran to be non-compliant—with no clear authority to do so.

While "[r]ecognizing the basic and inalienable right of all Member States to develop atomic energy for peaceful purpose,"[167] the IAEA repetitively asked Iran "to suspend all further uranium enrichment-related activities."[168] The language of the resolutions of the IAEA has slightly changed regarding the extent of suspension and right of states to nuclear energy in the course of time. However, in its essence, it always recognized the right of the member states to develop peaceful nuclear energy with due consideration for needs of developing countries and within the boundaries of NPT.[169] Iran did suspend all enrichment related and reprocessing activities in a voluntary, confidence-building measure[170] from 2003–05. Since then, Iran has disregarded this request.[171]

There is no need to study the legal basis of the question "whether the IAEA has the legal authority to prohibit Iran from enriching uranium," because it has never took such a position. Rather, it merely requested a suspension of enriching uranium until it can verify Iran's intention for its nuclear activities. However, as noted *supra*, the IAEA conveyed Iran's nuclear issue to the United Nations Security Council.[172] The Security Council, in its resolutions regarding Iran's nuclear program, then took the same position as the IAEA.[173] It affirmed "that Iran shall without further delay take the steps required by the IAEA Board of Governors in its resolution GOV/2006/14, which are essential to build confidence in the exclusively peaceful

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167. IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, ¶ (k), IAEA Doc. GOV/2003/69 (Sept. 12, 2003) [hereinafter *Implementation Agreement: Sept. 2003*].

168. *Id.* ¶ 3.

169. *Compare Implementation Agreement: Sept. 2003*, *supra* note 167, ¶ (k), *with* IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, ¶ (o), IAEA Doc. GOV/2003/81 (Nov. 26, 2003), *and* IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, ¶ 7, IAEA Doc. GOV/2004/49 (June 18, 2004), *and* IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, ¶ (d), ¶ 3, IAEA Doc. GOV/2004/79 (Sept. 18, 2004) [hereinafter *Implementation Agreement: Sept. 2004*].

170. *Implementation Agreement: Sept. 2004*, *supra* note 169, ¶ 3.

171. IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, ¶ 4, IAEA Doc. GOV/2006/14 (Feb. 4, 2006).

172. *Implementation Agreement 2005*, *supra* note 63, ¶ 2.

173. S.C. Res. 1696, *supra* note 65, ¶ 1.

purpose of its nuclear programme and to resolve outstanding questions."[174]

Consequently, the Security Council demanded that Iran suspend all enrichment-related and reprocessing activities, including research and development.[175] It further expressed "its intention, in the event that Iran has not by that date complied with this resolution, then to adopt appropriate measures under Article 41 if Chapter VII of the United Nations Charter to persuade Iran to comply with this resolution and the requirements of the IAEA."[176] Article 41 of Chapter VII of the Charter empowers the Security Council to dictate to the member states.[177] Iran did not comply with the resolution and since 2006, the Security Council has imposed six resolutions on Iran. These resolutions enforce heavy sanctions against Iran's banking system, ships, investments, cargoes, and arms sales, as well as travel restrictions against individuals whom the Security Council considers to be key figures in Iran's nuclear program.[178]

Legally, can the Security Council demand that Iran suspend "enrichment-related and reprocessing activities" or impose sanctions on Iran? Both are grounded in its authority pursuant to Chapter VII of the U.N. Charter. The issue is that none of the reports or resolutions of the IAEA consider Iran's nuclear program as a "threat to the peace, breach of the peace, and acts of aggression," while Chapter VII defines the Security Council's authority to act only in response to threats of this kind.[179] However, the Security Council has never characterized Iran or its nuclear program a "threat to the peace, breach of the peace, and acts of aggression."[180]

The closest that any Security Council statement comes to this standard is a July 2006 resolution that reminded the world that it is "concerned by the proliferation risks presented by the Iranian nuclear programme, mindful of its primary responsibility under the United Nations Charter for the maintenance of international peace and security, and [] determined to prevent an aggravation of the situation."[181]

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174. *Id.*
175. *Id.* ¶ 2.
176. *Id.* ¶ 8.
177. U.N. Charter art. 41.
178. S.C. Res. 1737, *supra* note 70, ¶ 10.
179. U.N. Charter ch. VII.
180. S.C. Res. 1737, *supra* note 70, ¶ 10; *see* U.N. Charter art. 39–41.
181. S.C. Res. 1696, *supra* note 65, at 2, ¶ 3.

According to the United Nations Charter, the Security Council takes action under the authority that is vested in the Security Council from Chapter VII of the United Nations Charter, after determining the existence of a serious threat to peace exists.[182]

For example, in the resolution authorizing the Korean police action in 1950, the Security Council noted "the armed attack on the Republic of Korea by forces from North Korea,"[183] and then determined that this action "constitutes breach of the peace."[184] In 1965, with regards to Southern Rhodesia, the Security Council clearly determined "that the situation resulting from proclamation of independence by the illegal authorities in Southern Rhodesia is extremely grave . . . and that its continuance in time constitutes a threat to international peace and security."[185] In the more recent case of the Persian Gulf War of 1990–91, the Security Council, in Resolution 660, determined "that there exists a breach of international peace and security as regards the Iraqi invasion of Kuwait."[186] Within the time period that the Security Council was adopting resolutions against Iran, Resolution 1907 determined that "Eritrea's actions undermining peace and reconciliation in Somalia as well as the dispute between Djibouti and Eritrea constitute a threat to international peace and security."[187] There is no such determination with respect to Iran in any resolutions of the Security Council, and sanctioning a country without such a finding is contrary to the practice of the Security Council.

There are also serious legal questions regarding the authority of the Security Council and whether it has plenary authority over international affairs. Even if one assumes that the Security Council had the authority to decide Iran's right to enrich uranium, and its actions under the authority of Chapter VII of the United Nations Charter had any legal basis, Iran's right to enrich uranium as a sovereign state, may nonetheless not be affected. Despite prior resolutions, the Security Council never prohibited Iran from enrichment. It merely demanded suspension of enrichment until Iran's nuclear program "be verified by the IAEA."[188]

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182. U.N. Charter art. 39.
183. S.C. Res. 82, ¶ 1 (June 25, 1950).
184. *Id.*
185. S.C. Res. 217, ¶ 1 (Nov. 20, 1965).
186. S.C. Res. 660 (Aug. 2, 1990).
187. S.C. Res. 1907 (Dec. 23, 2009).
188. S.C. Res. 1696, *supra* note 65, ¶ 2 (July 31, 2006).

In short, according to the IAEA, Iran did not meet its obligations under the Safeguards Agreement that it had negotiated with the IAEA under the NPT. The IAEA then, according to its vested treaty authority (with serious legal questions regarding statutory compliance) conveyed Iran's nuclear issue to the Security Council. The Security Council—again with serious legal questions surrounding the basis for action under Chapter VII of the U.N. Charter, and after demanding Iran suspend all "enrichment-related and reprocessing activities"—sanctioned Iran only to persuade it to cooperate with the international community. Nothing in this chain of events suggests that Iran is prohibited from enriching uranium. As a result, Iran is merely requested to suspend its enrichment program for verification under international law.[189]

The following summarizes Iran's nuclear obligations: "[The Security Council,] [d]emands, in this context, that Iran shall suspend all enrichment-related and reprocessing activities, including research and development, to be verified by the IAEA."[190] If the Security Council's resolutions were worded in a different manner, then Iran might not have the right to enrich uranium. However, this is not the case. Iran's alleged violations of the safeguard agreements have merely resulted in heavy economic sanctions and requests for conditional suspension of uranium-related reprocessing activities. Security Council resolutions therefore have not affected Iran's enrichment rights. International law is based on the principles of sovereignty of states and their consent.[191] International law gives near-universal discretion to sovereign states,[192] unless otherwise prohibited by regional treaties or customary international law. Since no textual provision of a treaty or Security Council action has specifically stated that Iran retains no enrichment authority, it undoubtedly retains the right to do so today.

## B. REGIONAL TREATIES

Regional treaties have the same authority as international treaties. In fact, regional treaties are a special form of

189. *Id.*

190. *Id.*

191. *See* Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, 238 ¶ 21 (July 6).

192. *Id.*

international treaties.[193] Iran and other Persian Gulf countries of the region are subject to the regional treaties they have signed—namely the Kuwait Convention and its associated protocols.

Persian Gulf countries have expressed concern regarding Iran's nuclear program, especially regarding the BNPP. In June 2013, United Arab Emirates and Saudi Arabia raised safety concerns during a closed-door meeting with the Board of Governors of IAEA.[194] The Bushehr plant is closer to five Arabian state capitals in the Persian Gulf region than it is to Tehran.[195] These concerns were escalated after an earthquake took place in that region in April 2013.[196] "Following the quake, the [Persian] Gulf Cooperation Council [P]GCC called on the IAEA to send a specialized technical team to inspect the Bushehr nuclear plant and investigate potential damage."[197] Persian Gulf countries are also concerned about possible future earthquakes and tsunamis.[198] In reference to the demand, the former head of the AEOI stated that "[t]he request of these countries is a political gesture and propaganda. IAEA inspectors are present in Iran and monitor Iran's nuclear activities."[199] Abbasi also remarked that the IAEA has not reported any deviation from safety standards in BNPP.[200] The IAEA has also not publicly acknowledged that "[t]he [BNPP] reactor is designed to withstand a magnitude 8 earthquake and to automatically shut down if there is a major earth movement."[201]

This analysis does not take the potential political issues of Persian Gulf countries into account and assumes that they have genuine concerns regarding the safety of Iran's nuclear program. The legal aspects of such concerns are presented in treaties and customary international law discussed *infra*.

Iran is not a signatory to any regional treaty that specifically discusses nuclear programs. Admittedly, Iran and

193. *See, e.g.*, R.A. Akindele, *Regional Treaties and the UN Charter: A Study in Comparative Law of International Institutions*, 14 MALAYA L. REV. 61 (1972).

194. *Iran's Gulf Arab Neighbors*, *supra* note 92.

195. *Id.*

196. *Iran Dismisses Concerns Over Bushehr Nuclear Power Plant,* PRESSTV (Apr. 17, 2013, 6:36 AM), http://www.presstv.com/detail/2013/04/17/298741/iran-stresses-bushehr-nuclear-plant-safety/.

197. *Id.*

198. *See* Almohsen, *supra* note 90.

199. *See Iran Dismisses Concerns, supra* note 196.

200. *Id.*

201. Almohsen, *supra* note 90.

other Persian Gulf countries are subject to the Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution.[202] However, the Kuwait Convention and its protocols are concerned about pollution of the sea area and do not specifically address nuclear pollution.[203] Additionally, no uranium enrichment site is located in the areas where Persian Gulf states are focused. The BNPP site also is a power plant, not a uranium enrichment facility. Thus, even if one assumes that Iran must halt its nuclear activities in areas close to other Persian Gulf states due to safety reasons, this assumption merely means Iran must shut down sites in such geographical areas, not sites in other locations—Natanz for example—which is located in the center of Iran[204] and is the main site for enriching uranium.[205] Such safety concerns do not affect the substance of Iran's enrichment rights. These are merely safety issues that if valid, should be addressed in a limited manner.

Even if Iran decides to enrich uranium in areas such as the BNPP, it would not be prohibited since the Kuwait Convention broadly defines pollution.[206] The Kuwait Convention does require Persian Gulf states to prevent pollution of the sea area, but it does not constrain nuclear activities close to the sea. The Protocol is mainly concerned about discharges from land-based sources[207] and it requires the states to develop and implement source control programs.[208]

Nuclear sites may be within the category of "land-based sources" within the definition of the Protocol if any discharge reaches the marine environment.[209] Iran is bound by the Protocol to develop and implement source control programs for BNPP if it affects the sea.[210] However, as long as Iran maintains the safety requirements that the Protocol asks for, the Kuwait

202. Kuwait Convention, *supra* note 85.

203. *E.g.*, Kuwait Convention, *supra* note 85; *Protocol*, *supra* note 94.

204. *Natanz Pass: Iran,* GEOGRAPHY, http://www.geographic.org/geographic_names/name.php?uni=-4520836&fid=2976&c=iran (last visited Sept. 28, 2015).

205. *Natanz Enrichment Complex,* NUCLEAR THREAT INITIATIVE, http://www.nti.org/facilities/170/ (last visited Sept. 28, 2015).

206. *See Protocol*, *supra* note 94, art. I (referring to Kuwait Convention, *supra* note 85, art. I).

207. *See id.* art. III.

208. *Id.* art. IV.

209. *Protocol*, *supra* note 94, art. I.

210. *Id.*

Convention and any associated protocol should not prohibit Iran from enriching uranium.

### C. CUSTOMARY INTERNATIONAL LAW AND SOFT LAW

In an advisory opinion regarding the legality of using nuclear weapons, the International Court of Justice considered all international treaties, international environmental law, humanitarian law, and customary international law, finding no basis that the use of nuclear weapons was prohibited.[211] If the use of nuclear weapons is not prohibited by customary international law and if sovereign states have not adopted an international custom to prohibit use for an extended period of time, then a state has most certainly not consented to any prohibitions on uranium enrichment. The fact that there are ninety-nine licenses for nuclear power plants in the United States and that 20% of its electricity[212] and 17% of Germany's electricity[213] is produced in nuclear power plants is powerful evidence that current state practice does not suggest a blanket prohibition on uranium enrichment.

The International Court of Justice studied the potential environmental issues related to use of a nuclear weapon and held that:

> [w]hile existing international law relating to the protection and safeguarding of the environment does not specifically prohibit the use of nuclear weapons, it indicates important environmental factors that are properly to be taken into account in the context of the implementation of the principles and rules of the law applicable in armed conflict.[214]

This reasoning applies even more forcefully to peaceful nuclear programs and uranium enrichment, which are easier to

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211. *See* Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 6).

212. *See Power Reactors,* NUCLEAR REG. COMM., http://www.nrc.gov/reactors/power.html (last visited Sept. 28, 2015).

213. *Nuclear Power in Germany*, WORLD NUCLEAR ASS'N, http://www.world-nuclear.org/info/Country-Profiles/Countries-G-N/Germany/ (last visited Oct. 4, 2015).

214. *See* Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, 243 ¶ 33 (July 6).

control.

Customary international environmental law provides a remedy for countries that are harmed as a result of activities in the territories of other countries.[215] This requires Iran to remedy any possible environmental harm its enrichment program may have on other countries, but it does not prohibit Iran from enriching uranium. Enjoining a particular industry or site within the territory of a sovereign state that causes harm to the territory of another state is possible in the framework of customary international law. However, in very limited cases, it is cognizable when there are serious consequences to an injured state proven by clear and convincing evidence.[216]

Environmental law principles and customary law encourage countries to bear the cost of environmental harms they may cause.[217] They also require a sovereign state to prevent environmental degradation.[218] Even "lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."[219] Iran is subject to international environmental law and may honor its non-binding principles, but international environmental law does not specifically prohibit Iran's uranium enrichment program in the midst of a lack of harm. Since an injury has not been proven in Iran's case, enjoining Iran's nuclear program is not currently an option.

## IV. CONCLUSION

The principle of sovereign equality, which is embodied in the Charter of the United Nations,[220] suggests Iran has the same rights and responsibilities of other sovereign states of the world. As a sovereign state, Iran and all countries of the international community are free to exercise sovereignty over their own territory. As a result, limitations on sovereign states are not

215. *See* Trail Smelter Arbitration (U.S. v. Can.), 3 R.I.A.A. 1905 (1938) (holding that international boundaries between nations are subject to limits of environmentally permissible conduct and that nations must not perpetrate significant harm to other nations through pollution).

216. *Id.* at 1965.

217. U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, princ. 16, U.N. Doc. A/CONF.151/26 (Vol. I), annex I (June 3–14, 1992).

218. *Id.* at princ. 15.

219. *Id.*

220. U.N. Charter art. 2.

presumed[221]—they must be proven. Neither treaties nor customary international law currently prohibits Iran from enriching uranium.

The right to enrich uranium is not a special right belonging to select countries. Sovereign states have not consented to discrimination over their ability to develop peaceful nuclear technology. All signatory states of the NPT and members of the IAEA have the right to enrich uranium unless bound by another treaty. Non-recognition of this right is a political question, not a legal one, and must be treated as such.

221. Winston P. Nagan & Craig Hammer, *The Changing Character of Sovereignty in International Law and International Relations,* 43 COLUM. J. TRANSNAT'L L. 141, 154 (2004).