U.S.-Russian Civilian Nuclear Cooperation Agreement: Issues for Congress

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Summary

The United States and Russia signed a civilian nuclear cooperation agreement on May 6, 2008. President Bush submitted the agreement to Congress on May 13. The agreement was withdrawn from congressional consideration by President George W. Bush on September 8, 2008, in response to Russia's military actions in Georgia. President Obama transmitted the proposed text of the agreement to Congress on May 10, 2010, along with the required Nuclear Proliferation Assessment (NPAS) and his determination that the agreement promotes U.S. national security. Congress has 30 days of continuous session for consultations with the administration, followed by an additional 60 days of continuous session to review the agreement. If not opposed by a joint resolution of disapproval or other legislation, then the agreement will be considered approved at the end of this time period.

This report discusses key policy issues related to the agreement, including future nuclear energy cooperation with Russia, U.S.-Russian bilateral relations, nonproliferation cooperation, and Russian policies toward Iran. These issues were also relevant to the debate when the agreement was being considered in the 110th Congress.

This report will be updated as events warrant.

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On May 10, 2010, President Obama transmitted the proposed text of the U.S.-Russian civilian nuclear cooperation agreement to Congress for approval, along with the required Nuclear Proliferation Assessment (NPAS) and his determination that the agreement promotes U.S. national security. The annexed classified NPAS was to be submitted separately. The agreement was signed by the two countries in Moscow on May 6, 2008. President George W. Bush first submitted it to Congress on May 13, 2008,[1] but in September 2008 rescinded the national security determination following Russian military actions in the Republic of Georgia. This had the effect of removing the agreement from congressional consideration. President Obama stated his commitment to seeing the agreement enter into force in summit statements with Russian President Medvedev in April and July 2009. President Obama's May 10, 2010, letter of transmittal says that the situation in Georgia is no longer an obstacle and that "the level and scope of U.S.-Russian cooperation on Iran are sufficient to justify resubmitting the proposed agreement."[2]

According to President Obama's letter, the agreement meets all the terms of the Atomic Energy Act[3] and therefore does not require any exemptions from the law's requirements. Therefore, the agreement will enter into effect after a 30-day consultation period and a review period of 60 days of continuous session[4] unless Congress enacts a joint resolution of disapproval. Congress also has the option of adopting either a joint resolution of approval with (or without) conditions, or standalone legislation that could approve or disapprove the agreement.[5]

The agreement would permit the export, subject to licensing, of technology, material, equipment, and components for nuclear research and nuclear power production. The agreement would not permit transfer of restricted data. The agreement need to be amended before any transfer of sensitive nuclear technology, sensitive nuclear facilities, and major critical components of those facilities. The parties would also need to agree to reprocessing of material transferred under the agreement. Some limited enrichment and blending or down-blending for LEU fuel production would be permitted.

Background

Section 123 of the U.S. Atomic Energy Act (AEA) of 1954 (42 U.S.C. 2011 et seq.) governs significant nuclear cooperation between the United States and other states.[6] The United States has agreements for civil nuclear cooperation in place with almost 50 countries. Such agreements,

[1] http://www.whitehouse.gov/news/releases/2008/05/20080513-1.html.

[2] Message from the President regarding a Peaceful Nuclear Agreement with Russia, May 10, 2010, http://www.whitehouse.gov/the-press-office/message-president-regarding-a-peaceful-nuclear-agreement-with-russia

[3] Under section 123.a., codified at 42 U.S.C. 2153(a)), Atomic Energy Act of 1946, ch. 724, 60 Stat. 755 (1946), as amended.

[4] Days on which either House is in a recess of more than three days (pursuant to a concurrent resolution authorizing the recess) do not count toward the total. If Congress adjourns its session *sine die*, continuity is broken, and the count starts anew when it reconvenes.

[5] See CRS Report RL34541, *Nuclear Cooperation Agreement with Russia: Statutory Procedures for Congressional Consideration and Their Implementation*, by Richard S. Beth.

[6] Nuclear cooperation includes the distribution of special nuclear material, source material, and byproduct material, to licensing for commercial, medical, and industrial purposes. These terms, "special nuclear material," "source material," and "byproduct material," as well as other terms used in the statute, are defined in 42 U.S.C. §2014. See also CRS Report RS22937, *Nuclear Cooperation with Other Countries: A Primer*, by Paul K. Kerr and Mary Beth Nikitin.

known as "123 agreements," provide the framework and authorization for cooperation, but do not guarantee certain exports, technology, or material. Before significant nuclear exports[7] can occur, the State Department, with the advice of the Department of Energy, negotiates an agreement, which must meet criteria listed in Section 123.a., (1) through (9), 42 U.S.C. 2151.[8] Russia is the only NPT-recognized nuclear weapon state and the only major nuclear energy producer with whom the United States does not yet have a civilian nuclear cooperation agreement. In the case of the agreement with China, Members of Congress attached conditions to a joint resolution of approval of the agreement, based on concerns, among others, that China was exporting materials and equipment relevant for nuclear weapons development to non-nuclear weapon states.[9]

Cooperation between the United States and Russia on civilian nuclear energy is not new, but the level has fluctuated depending on broader political developments. The United States and the Soviet Union concluded a limited 10-year agreement for nuclear cooperation in 1973 to allow for cooperation in controlled thermonuclear fusion, fast breeder reactors, and fundamental research. The 1973 agreement also established a Joint Committee on Cooperation in the Peaceful Uses of Atomic Energy that was to meet annually. This agreement was extended in 1983 and in 1988, and exchanges on safety practices significantly increased after the 1986 Chernobyl power plant accident. The two superpowers convened a Joint Coordinating Committee for Civilian Reactor Safety starting in 1988.[10]

After the fall of the Soviet Union and prior to July 2006, Moscow's nuclear commerce with Iran presented the chief obstacle to concluding a broad U.S.-Russian nuclear cooperation under section 123. Project-specific agreements were concluded throughout this period. Several factors may have contributed to the shift in U.S. policy under the George W. Bush administration: a tougher line by Moscow since 2003 with respect to Iran, especially Russia's agreement with Iran to take back spent nuclear fuel from the Russian-built Bushehr reactor; President Bush's embrace of nuclear power as an alternative to reliance on hydrocarbons; President Bush's proposals to multi-lateralize the nuclear fuel cycle and develop proliferation-resistant technologies through the Global Nuclear Energy Partnership (GNEP); and Russia's own proposals to host an international fuel center that would store and reprocess spent fuel and enrich uranium for fresh fuel.

Under the Obama Administration, officials have expressed support for the nuclear cooperation agreement with Russia, but were waiting for the "appropriate time" to submit the agreement to Congress.[11] President Obama's letter of May 10, 2010, outlines ways in which the current administration sees this agreement as being beneficial for U.S. interests, primarily in that it would contribute to "the growth of clean, safe and secure nuclear energy for peaceful purposes." The

[7] Significant nuclear cooperation includes the physical transfer of reactors, reactor components, or special nuclear material, source material, and byproduct material, under license for commercial, medical, and industrial purposes.

[8] The Atomic Energy Act also sets out procedures for licensing exports to states with whom the United States has nuclear cooperation agreements. (Sections 126, 127, and 128 codified as amended at 42 U.S.C. 2155, 2156, 2157.) Even with a 123 agreement in place, each export of nuclear material, equipment, or technology requires a specific export license or other authorization.

[9] See P.L. 99-183 and CRS Report RL33192, *U.S.-China Nuclear Cooperation Agreement*, coordinated by Shirley A. Kan.

[10] CRS Report 89-671, *U.S.-Soviet Nuclear Energy Cooperation: Time for a Full Scope Agreement?* by Warren H. Donnelly (out of print; available from the author upon request).

[11] Hearing of the Terrorism, Nonproliferation and Trade Subcommittee of the House Foreign Affairs Committee, "The Future of U.S. International Nuclear Cooperation," May 6, 2010.

letter cites several areas of recent "progress" in cooperation between the United States and Russia:

- Russian support for a new United Nations Security Council Resolution on Iran.
- Signature on April 8, 2010, of the New START Treaty that would reduce the number of deployed strategic nuclear weapons.[12]
- Signature on April 13, 2010, of the Protocol to amend the 2000 U.S. Russian Plutonium Management and Disposition Agreement, which will dispose of at least 34 metric tons of excess weapons plutonium in each country.
- Russia's establishment of an international nuclear fuel reserve in Angarsk.
- Continued joint support for the Global Initiative to Combat Nuclear Terrorism.

Congressional Consideration

Congressional debate over the agreement in the past has focused on several key issues: the nature of Russian-Iranian cooperation, the impact of a U.S.-Russian agreement on the future of nuclear fuel cycle policies, and the impact of the agreement on bilateral relations including nuclear nonproliferation cooperation. While some view the agreement as promoting bilateral cooperation on U.S. nonproliferation goals and as a recognition of recent Russian cooperation, others believe the United States could gain leverage on negotiations with Russia on Iran and other matters by delaying approval of the agreement.

Legislation in the 110th Congress

Even before the crisis in the Republic of Georgia in August 2008, approval of a US-Russia 123 agreement by Congress was not certain. Legislation both supporting and opposing the agreement was introduced in the 110th Congress:

- Representative Edward Markey on May 14, 2008, introduced H.J.Res. 85 expressing disfavor of the agreement.
- On June 24, 2008, Chairman of the Senate Foreign Relations Committee Joseph Biden and Senator Richard Lugar submitted a joint resolution of approval, S.J.Res. 42. It was discharged from committee but indefinitely postponed by unanimous consent in September 2008.
- Chairman of the House Committee on Foreign Affairs Howard Berman and Ranking Member Ileana Ros-Lehtinen introduced a resolution of disapproval, H.J.Res. 95, on June 24, 2008.
- The House Committee on Foreign Affairs reported H.R. 6574[13] on July 23, 2008. This bill would have approved the U.S.-Russia 123 agreement, notwithstanding the AEA, with certain conditions. Under this resolution, no license could be issued for the export of nuclear material, equipment, or technology to Russia unless the President certified to Congress that Russia (1) is not transferring

[12] CRS Report R41219, *The New START Treaty: Central Limits and Key Provisions*, by Amy F. Woolf

[13] The United States-Russian Federation Nuclear Cooperation Agreement Act of 2008.

> sensitive nuclear, biological- or chemical-weapons-related, ballistic or cruise missile technologies, goods, or services to Iran; (2) is cooperating with the United States on international sanctions on Iran; and (3) had ratified appropriate nuclear liability conventions or enacted domestic laws to protect U.S. firms.

In response to Russian actions in August over the conflict in Georgia, some members of Congress called on the Bush administration to withdraw the agreement from congressional consideration.[14]

There was no precedent for the President withdrawing a 123 from congressional consideration, and the Atomic Energy Act does not specify procedures for doing so. On September 8, 2008, the Secretary of State issued a statement saying that the President would notify Congress that "he has today rescinded his prior determination" regarding the agreement and therefore there is no basis for Congress to consider it. Secretary Rice states that "the U.S. nonproliferation goals contained in the proposed Agreement remain valid: to provide a sound basis for U.S.-Russian civil nuclear cooperation, create commercial opportunities, and enhance cooperation with Russia on important global nonproliferation issues." She expresses regret for the decision but says that "unfortunately, given the current environment, the time is not right for this agreement."[15] In his message to Congress, President Bush wrote that this decision is "in view of recent actions by the Government of the Russian Federation incompatible with peaceful relations with its sovereign and democratic neighbor Georgia." In the original determination of May 5, 2008 (Presidential Determination 2008-19), the President determined that the agreement will promote and will not pose an unreasonable risk "to the common defense and security."[16] The President's message of September 8 says this determination "is no longer effective." It also says that "if circumstances should permit future reconsideration of the proposed Agreement, a new determination will be made and the proposed Agreement will be submitted for congressional review pursuant to section 123 of the Act."[17]

Additional legislation proposed in the 110th Congress focused on Iran's nuclear programs and also sought to condition nuclear cooperation with Russia. The Iran Counter-Proliferation Act of 2007 (H.R. 1400), passed by the House, would prohibit any "agreement for cooperation between the United States and the government of any country that is assisting the nuclear program of Iran or transferring advanced conventional weapons or missiles to Iran." Similarly, S. 970 specifically would have prohibited a 123 agreement with Russia until "Russia has suspended all nuclear assistance to Iran and all transfers of advanced conventional weapons and missiles to Iran" or "Iran has completely, verifiably, and irreversibly dismantled all nuclear enrichment-related and reprocessing-related programs."

The Iran Sanctions Act of 2008 (S. 3227) included a prohibition on entering into a nuclear cooperation agreement with Russia or granting licenses for the direct or indirect export or the direct or indirect transfer of nuclear-related goods, services, or technologies to Russia until certain

[14] For example, House Foreign Affairs Committee Republicans press release, August 19, 2008, http://foreignaffairs.republicans.house.gov/list/press/foreignaffairs_rep/081908123.shtml, and Joseph Biden, "Op-Ed: Russia Must Stand Down," *The Financial Times*, August 12, 2008.

[15] Statement on U.S.-Russia 123 Agreement, September 8, 2008, at http://www.state.gov/secretary/rm/2008/09/109256.htm.

[16] http://www.whitehouse.gov/news/releases/2008/05/20080506-4.html.

[17] Message to the Congress of the United States, September 8, 2008, at http://georgewbush-whitehouse.archives.gov/news/releases/2008/09/20080908-3.html.

presidential certifications are made. S. 3227 was reported out of the Senate Finance Committee on July 7, 2008, but was not passed by the full Senate.

The Security through Termination of Proliferation Act of 2008 (H.R. 6178, introduced on June 4, 2008) included similar provisions, including that a nuclear cooperation agreement with a country proliferating to Iran, North Korea, or Syria may not enter into force. These bills, as well as letters sent to the President from Members of Congress after submittal of the 123 agreement to the Congress, showed a linkage between Russia's policies toward Iran and support for a bilateral civilian nuclear accord in Congress.

The 2008 Nuclear Proliferation Assessment Statement (NPAS)

In 2008, some Members of Congress raised concerns about the information contained in the Nuclear Proliferation Assessment Statement (NPAS). The NPAS is described in section 123.a. (42 U.S.C. 2153(a)) and is required part of a 123 agreement package for Congress. An unclassified NPAS is submitted along with the proposed text of the agreement, and a classified annex is submitted separately. The NPAS is to be prepared by the State Department in consultation with the Director of National Intelligence. Its purpose is to explain how the agreement meets the AEA nonproliferation requirements. The unclassified NPAS usually includes an overview of the country's nuclear energy program and related infrastructure, nuclear weapons program (if relevant), nonproliferation policies, and relations with third countries of concern in the nuclear arena.

Some Members of Congress were concerned that the 2008 NPAS for the US-Russia 123 agreement excluded information regarding nuclear trade between Russia and Iran. This prompted then-Chairman of the House Energy and Commerce Committee John Dingell and Subcommittee on Oversight and Investigations Chairman Bart Stupak to request that the Government Accountability Office (GAO) evaluate the inter-agency process for development of U.S.-Russia NPAS, whether the NPAS conclusions were supported, and whether any information was omitted that might change these conclusions.[18] The GAO also lists Chairman Henry Waxman and Representative Edward Markey as report requesters. The GAO issued its report in July 2009.[19] The findings were related primarily to the inter-agency review process and recommended that the State Department should clarify interagency roles, allow adequate time for review by the intelligence community and the Nuclear Regulatory Commission, and establish written procedures for development and review of 123 agreements and associated documents.

Legislation in the 111th Congress

Upon the Obama administration's transmittal of the agreement to Congress in 2010, Chairman of the House Foreign Affairs Committee Howard Berman said that the top nonproliferation policy priority should be preventing Iran from obtaining nuclear weapons and that "at the appropriate time, we will examine the agreement more fully."[20] On May 21, 2010, Representative Edward

[18] http://energycommerce.house.gov/Press_110/110-ltr.052208.GAO.123.ltr.pdf

[19] "U.S.-Russia Nuclear Agreement: Interagency Process Used to Develop the Classified Nuclear Proliferation Assessment Needs To Be Strengthened," http://www.gao.gov/new.items/d09743r.pdf

[20] "Chairman Berman responds to Administration's U.S.-Russia nuclear proposal," House Committee on Foreign Affairs Press Release, May 11, 2010.

Markey and co-sponsor Representative Jeff Fortenberry introduced a joint resolution (H.J.Res. 85) expressing disfavor of the agreement.

On June 21, 2010, House Foreign Affairs Committee Chairman Howard Berman and co-sponsor Representative Dana Rohrabacher introduced a joint resolution that provides for approval of the agreement with Russia (H.J.Res. 91). On the same day, House Foreign Affairs Committee Ranking Member Ileana Ros-Lehtinen introduced a joint resolution that provides for disapproval of the proposed agreement (H.J.Res. 92). Representatives Burton and Royce co-sponsored H.J.Res. 92.

The Iran Sanctions Bill

The Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010 was signed by the President on July 1, 2010 (P.L. 111-195). Conference reports were agreed to by the House and Senate on June 24, 2010. H.Rept. 111-512 says that it is the sense of Congress that no export licenses should be given under a civilian nuclear cooperation (123) agreement if the recipient country "is providing similar nuclear material, facilities, components, or other goods, services, or technology to another country that is not in full compliance with its obligations under the Nuclear Non-Proliferation Treaty."

Section 102, subsection a, of the bill would prohibit issuance of export licenses under a 123 agreement for "any country whose nationals have engaged in activities with Iran relating to the acquisition or development of nuclear weapons or related technology, or of missiles or other advanced conventional weapons that have been designed or modified to deliver a nuclear weapon." The President can waive the provision by making a determination and notification to the appropriate congressional committees that the country did not know or have reason to know about the activity, or if the country is taking "all reasonable steps" to prevent recurrence and penalize the person involved. This language is similar to the House version of the bill passed in December 2009.

The earlier report (H.Rept. 111-342) states that "the Committee believes that a country that is, as a matter of policy or through willful inaction, allowing its citizens or companies to provide equipment, technology or materials to Iran that make a material contribution to its nuclear capabilities should not at the same time benefit from nuclear cooperation with the United States."

Nuclear Energy and Nonproliferation Cooperation

The United States and Russia currently cooperate on a variety of nuclear nonproliferation and nuclear energy initiatives, under ad hoc agreements. While this cooperation is focused primarily on nuclear nonproliferation measures, in recent years the United States and Russia have explored ways to develop civilian nuclear energy cooperation. Presidents Bush and Putin in July 2006 established a working group[21] whose report defined an Action Plan for cooperation that led to the bilateral Presidential Declaration on Nuclear Energy and Nonproliferation of July 3, 2007.[22] The

[21] "Joint Working Group on the Development of a Bilateral Action Plan to Enhance Global and Bilateral Nuclear Energy Cooperation," at http://www.doe.gov/news/4553.htm.

[22] Text of Declaration on Nuclear Energy and Nonproliferation Joint Actions, July 3, 2007, at http://moscow.usembassy.gov/st_07032007.html.

working group discussions also contributed to conclusion of a draft agreement on civilian nuclear cooperation in spring 2007. U.S. officials have stated that a 123 agreement is needed to implement this action plan—for example, full scale technical cooperation on fast reactors and demonstration of advanced spent fuel processing and waste management technologies.[23]

In an effort to continue this process and as part of the Obama administrations "reset" of relations with Russia, in July 2009 Presidents Obama and Medvedev established a Bilateral Presidential Commission that included a Working Group on Nuclear Energy and Security chaired by Sergei V. Kiriyenko, Head of Rosatom, and Daniel Poneman, Deputy Secretary of Energy. The July 2009 Joint Statement reaffirmed their intention to bring a bilateral nuclear cooperation agreement into force and said that the two countries would focus on

- development of prospective and innovative nuclear energy systems;
- research into methods and mechanisms for the provision of reliable nuclear fuel cycle services;
- research into international approaches for the establishment of nuclear fuel cycle services to secure the nuclear weapons nonproliferation regime; and
- improvement of the international safeguards system.

The working group agreed on an Action Plan for nuclear security and civil nuclear energy cooperation in September 2009. A commission report said that the working group identified research and development areas for collaboration and is working on a "new fuel services framework."[24]

Proponents of a 123 agreement with Russia argue that future cooperation under such an agreement could include development of advanced nuclear fuel cycle technologies and a future generation of proliferation-resistant reactors[25] through joint commercial partnerships. A common argument in favor of the agreement is that the United States could gain from Russian advanced fuel cycle research and development experience. Because the United States does not operate fast neutron reactors or reprocess, testing of fuels could be done in Russia, including post-irradiation examination. Supporters argue that U.S. partnership in developing these technologies could help ensure that proliferation resistance remains a priority. On the other hand, critics point out that the agreement risks entrenching a policy of accepting reprocessing as a necessary part of the future of nuclear energy (although a future administration and Congress would always have the ability to guide the pace and direction of these developments).

A 123 agreement could provide Russia with access to U.S. nuclear technologies and markets, the right to receive U.S.-origin nuclear materials into Russia for storage or processing, and an improved international image for its nuclear industry. Some argue that the agreement might be construed as U.S. approval for Russia's civilian nuclear industry, thereby enabling Moscow to

[23] This effort would be part of GNEP and the multi-nation Generation IV initiative to develop the next generation of civil nuclear power reactors. Collaboration may also take place under the rubric of the IAEA International Project on Innovative Nuclear Rectors and Fuel Cycles (INPRO).

[24] "Joint Statement by the U.S. - Russia Bilateral Presidential Commission Coordinators on Commission Progress," December 31, 2009, http://moscow.usembassy.gov/st_123109.html.

[25] "Proliferation-resistant" generally refers to reactors or fuel cycle technologies specifically developed to make it more difficult to divert material for weapons use, and can sometimes refer to reprocessing technology that would not result in separated plutonium.

conclude similar agreements with other countries. Some have criticized the agreement on this basis—that safety and environmental problems with the Russian nuclear industry remain and therefore it would be premature to give approval until these problems were remedied. Others counter that only through such an agreement will U.S. safety technology and standards be available to Russia. Russia could potentially expand its reach into new nuclear power markets by adding U.S. safety and automated control systems to its exported reactors, or partnering with U.S. multinationals. Russia could also potentially improve the operational efficiency of its own reactors with U.S. technology.[26]

The United States and Russia both promote a future global nuclear energy framework that addresses emerging nuclear energy states' fuel needs while dissuading them from pursuing indigenous enrichment and reprocessing technologies. This includes a "cradle to grave" approach to nuclear fuel. As part of this effort, recent Russian nuclear power plant exports, such as with Turkey, are a "package deal" that would include construction, operation, fuel services, and spent fuel return.[27] Broader proposals to discourage new states from building fuel cycle facilities include the development of multilateral fuel assurances and international fuel service centers.[28] For this purpose, Russia has set up the joint venture International Uranium Enrichment Center at Angarsk, which is under international safeguards. An international LEU fuel reserve will also be hosted at the site. Proponents of the agreement say that collaboration between the United States and Russia on providing nuclear fuel cycle services to nonnuclear weapon states could increase the confidence of customer states and therefore increase participation.

Experts and policy makers have also been exploring what role Russia could play in addressing the issue of nuclear waste and spent fuel disposition. Some have proposed that a 123 agreement with Russia could open the possibility of reprocessing U.S.-origin spent fuel from third countries (although Russia has not yet decided to do this) or long-term spent fuel storage of such material in Russia.[29] The enrichment of U.S.-obligated reprocessed uranium, and the re-enrichment of U.S. uranium tails or U.S.-origin tails, using Russian enrichment facilities, could likewise occur only if a 123 agreement was in force.[30] Under Article 9 of the proposed agreement, conversion and enrichment to less than 20%, fabrication of LEU fuel, irradiation, blending, or down-blending to LEU would be permitted under the agreement. The parties would have to agree to reprocessing of U.S.-origin spent fuel before this occurred.

Analysts also discuss the possibility of Russia establishing an International Spent Fuel Storage Facility (ISFSF) that could accept U.S.-origin spent fuel, for example from Taiwan or South Korea, or as part of a Russian fuel leasing and return program for future nuclear power plants abroad.[31] The U.S. may encourage an ISFSF in Russia as a way to prevent countries from

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[26] For a detailed description of advantages of a U.S.-Russia 123 agreement for Russian nuclear industry, see Anton Khlopkov, "What Will a Nuclear Agreement with the United States Bring Russia?" *Security Index*, No. 2 (82), Volume 13.

[27] "Akkuyuu plant construction to begin in 2011, says Turkish energy ministry," *Platts Nucleonics Week*, May 27, 2010.

[28] See CRS Report RL34234, *Managing the Nuclear Fuel Cycle: Policy Implications of Expanding Global Access to Nuclear Power*, coordinated by Mary Beth Nikitin.

[29] According to the Atomic Energy Act, this would be considered a subsequent arrangement, under Section 131.

[30] Import of tailings to Russia from European countries was halted in 2007 because of public protest and environmental concerns. "Russia quits uranium tailings imports over safety concerns," *RIA Novosti*, June 22, 2007. Existing contracts will be fulfilled (two with URENCO until 2009; two with EURODIF until 2014).

[31] "Analysis: Storage needs for nuclear growth," *UPI Energy*, May 6, 2008.

pursuing reprocessing technologies. The Russian Duma passed a law in 2001 allowing for Russia to accept foreign spent fuel imports, but because of public opposition, Russian officials have stated that Russia does not now plan to import non-Russian-origin spent fuel for storage. Russia currently imports Russian-origin spent fuel for storage.

Nuclear Liability

Nuclear liability coverage for U.S. companies doing business in Russia is a key factor for implementation of a U.S.-Russia section 123 agreement. The Russian Federation has been party to the Vienna Convention on Civil Liability for Nuclear Damage since 2005. However, Rosatom Corporation enjoys sovereign immunity as a partially state-owned enterprise. Russia has not yet signed or ratified the Convention on Supplementary Compensation for Nuclear Damage (CSC).[32] Currently, ad hoc bilateral agreements with liability coverage are in place for U.S. safety and nonproliferation assistance programs. Some U.S. companies have stated that they would need Russia ratify the CSC or adopt domestic laws that would provide liability protection for U.S. firms before doing business in Russia. In a 2003 letter to the Bush Administration, the Contractors International Group on Nuclear Liability (CIGNL) wrote that "the various bilateral and multilateral indemnity agreements that have been concluded to date are not considered to provide adequate nuclear liability protection by most large, well-capitalized U.S. companies."[33] As cited above, the proposed legislation reported out of the House Foreign Affairs Committee (H.R. 6574) in 2008 would have approved the agreement with conditions that included the stipulation that Russia would have to ratify appropriate nuclear liability conventions or enact domestic laws to protect U.S. firms before a license under the agreement could be issued.

U.S.-Russian Relations[34]

The main focus of U.S.-Russia relations over the past year has been the negotiation of a follow-on Strategic Arms Reduction Treaty.[35] However, Presidents Obama and Medvedev set up a process to review engagement in many sectors, as part of a "reset." The NATO-Russia Council resumed its meetings in April 2009, and in July 2009, the Russian President announced that Russia would grant supply rights to NATO forces in Afghanistan overland and in Russian airspace. Differences remain over a number of foreign policy issues, particularly Russian military bases in and diplomatic recognition of Abkhazia and South Ossetia, characteristics of future missile defense systems in Eastern Europe, the expansion of NATO and how to deal with the Iranian nuclear program. In this context, some argue that expanding cooperation with Russia on civilian nuclear energy is premature. Others argue that nonproliferation, nuclear terrorism prevention, and nuclear

[32] The United States' ratification of the CSC came into effect on May 21, 2008. The CSC has not yet entered into force. Article XX.1 of the CSC states that it "shall come into force on the ninetieth day following the date on which at least 5 States with a minimum of 400,000 units of installed nuclear capacity have deposited an instrument referred to in Article XVIII." Thirteen countries have signed the CSC, but only four have ratified it.

[33] See letter from the Contractors International Group on Nuclear Liability of December 18, 2003, annexed to the testimony of Henry Sokolski to the House Committee on Foreign Affairs, June 12, 2008, at http://foreignaffairs.house.gov/110/sok061208.pdf.

[34] See also CRS Report RL33407, *Russian Political, Economic, and Security Issues and U.S. Interests*, coordinated by Jim Nichol.

[35] CRS Report R41219, *The New START Treaty: Central Limits and Key Provisions*, by Amy F. Woolf.

energy may have particular value for the bilateral relationship in this context, and that a 123 agreement could be used to influence Russian policies.[36]

U.S. Ambassador Burns remarked at the May 2008 signing ceremony that the 123 agreement marks Washington and Moscow's transition from "nuclear rivals" to "nuclear partners." Although a 123 agreement will not itself stipulate new programs or collaborative projects, it may have symbolic value and remove a longtime irritant in bilateral relations. Supporters argue that rejecting the agreement could embolden anti-U.S. sentiment and be counter-productive to cooperation in other areas. Critics counter that its symbolic value is a reason not to enact it at this time—it could be viewed as a reward for a Russian government that critics view as antidemocratic and repressive, and whose foreign policy often has been at odds with U.S. interests. President Bush's rescission of the national security determination as related to the proposed 123 agreement in 2008 following Russian military actions in Georgia clearly demonstrated the possibility of other foreign policy priorities overshadowing U.S.-Russian nuclear energy cooperation.

Russian Policy Toward Iran

During the Clinton Administration and the early Bush Administration, the United States had a policy not to conclude a civilian nuclear cooperation agreement with Russia while it was building a nuclear power reactor for Iran at Bushehr. After details about Iran's clandestine nuclear activities came to light during 2002-2006, Russia began to step up cooperation with the United States and other countries negotiating with Iran over its nuclear program. Russia has insisted on IAEA safeguards on any transfers to Iran's civilian nuclear reactor at Bushehr. The 2005 Russian-Iranian agreement on fuel supply for Bushehr requires the return of spent fuel to Russia, in order to prevent Iran from extracting plutonium from the spent fuel. Moscow also invited Tehran to participate in its newly established international uranium enrichment center at Angarsk, as an alternative to an indigenous Iranian enrichment capability—an offer that Iran has rejected. The Bush administration supported this approach and since 2002 no longer objected to Russia's building the Bushehr nuclear power plant in Iran. The Bush and Obama administrations viewed the Russian provision and take-back of nuclear fuel for the Bushehr reactor as demonstrating that it is possible for Iran to have access to nuclear energy without developing its own fuel cycle.[37]

Russia has generally been only reluctantly supportive of U.N. Security Council Resolutions (UNSCRs) imposing sanctions on Iran, preferring a primarily diplomatic solution to the crisis. However, President Putin signed decrees to fully implement UNSCRs 1737, 1747, and 1803 in 2008,[38] and Russia also supported UNSCR 1835. In 2009, Russia and the United States worked closely on proposals to supply the Tehran Research Reactor with fuel.[39] In May 2010, Russia announced its support for a new UN Security Council sanctions resolution, an objective of the Obama administration. In general, analysts argue that Russian and American views about the

[36] Richard Lugar and Sam Nunn, "Help Russia Help Us," *New York Times*, May 30, 2008, at http://www.nytimes.com/2008/05/30/opinion/30lugar.html?th&emc=th.

[37] Nuclear Proliferation Assessment Statement, 2008, 2010.

[38] "Medvedev Likely to Face Problems with Iran," *RIA Novosti*, May 13, 2008, at http://en.rian.ru/analysis/20080513/107253545.html.

[39] CRS Report RL34544, *Iran's Nuclear Program: Status*, by Paul K. Kerr.

nature of the Iranian nuclear program have come closer in recent years, particularly following the revelation in September 2009 of the enrichment facility being built at Qom.

Continued questions about the nature and extent of Russian cooperation with Iran remain a potential obstacle to future approval of the 123 agreement by Congress. The 2006 Iran Freedom Support Act (P.L. 109-293) stated the sense of Congress that no nuclear cooperation agreement should be entered into with a country that is assisting the nuclear program of Iran. As noted above, the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2009 (H.R. 2194) would amend the Iran Support Act to prohibit peaceful nuclear cooperation with a country if one of its citizens or companies was assisting Iran in its nuclear weapons program.

Both the 2008 and 2010 NPAS state that the United States "has received assurances from Russia at the highest levels that its government would not tolerate cooperation with Iran in violation of its U.N. Security Council obligations." Some reports in 2008 said that Russian entities had transferred sensitive nuclear technology to Iran, but this activity was ended by high-level Russian governmental intervention and assurances were given to the highest levels of the U.S. government.[40] Additional details on the proliferation concerns associated with Russian-Iranian cooperation are likely part of the classified annex.

The 2009 Director of National Intelligence report to Congress on WMD Acquisition says that "entities in Russia and China continue to sell technologies and components in the Middle East and South Asia that are dual use and could support WMD and missile programs…. Russian entities have provided assistance to missile and civil nuclear programs in Iran and India." The report also says that Russian entities have been a source of dual-use biotechnology equipment and expertise, including for Iran.[41]

Another issue of congressional interest is the planned Russian sale of five S-300 air defense systems to Iran. Russia has so far stalled on completing this transaction. It is expected to be deployed near Iranian nuclear facilities. The May 2010 draft of the UN Security Council sanctions resolution on Iran would not prohibit this transfer. Air defense systems are not prohibited under international export control regimes, nor would the transfer automatically fall under any current U.S. sanctions.

On May 21, 2010, the State Department announced it was removing sanctions on four sanctioned entities in Russia.[42] Since 1998, at least 19 different Russian entities have been placed under proliferation-related sanctions on over 20 different occasions. However, with the removals on May 21, there appear to be no current proliferation-related sanctions against Russian entities.[43] Some observers have asserted that removal of sanctions was done in exchange for Russian

[40] "Prospects for a U.S.-Russian Agreement for Peaceful Nuclear Cooperation in Congress: Robert Einhorn and Jon Wolfsthal," Remarks at the Carnegie Moscow Center, April 15, 2008, http://www.carnegie.ru/en/news/78128.htm.

[41] Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions Covering 1 January to 31 December 2009. http://www.dni.gov/reports/2009_721_Report.pdf.

[42] Sanctions were lifted on Rosoboronexport, Dmitry Mendeleev University of Chemical Technology, the Moscow Aviation Institute and the Tula Instrument Design Bureau. Federal Register, Vol. 75, No. 98, May 21, 2010.

[43] This include sanctions under Executive Order 12938, the Iran, North Korea, Syria Nonproliferation Act, the Iran Nonproliferation Act of 2000, missile sanctions laws, etc. Available at "Nonproliferation Sanctions," State Department website, http://www.state.gov/t/isn/c15231.htm There are some Russian entities still under State Department sanctions for "Transfer of Lethal Military Equipment."

support for a draft UN Security Council resolution that strengthens sanctions against Iran. The State Department spokesman has said that, regardless, there was no evidence that the companies removed from the sanctions list were currently transferring arms or technology.[44] In March 2010, the administration lifted sanctions on two other Russian entities, Glavkosmos and the Baltic State Technical University, both sanctioned in 1998 for helping Iran's missile and weapons programs.

Additionally, the Department of Commerce lists entities subject to license requirements for proliferation-related end-use or end-user controls under Part 744 Supplement of the Export Administration Regulations (EAR). As of February 19, 2010, there were eight Russian entities on this list.[45] Three of these entities' license applications are reviewed on a case-by-case basis, while five are under "presumption of denial." According to Commerce Department officials, this list is currently under review.

Some argue that maximum leverage has already been gained in coaxing Russian behavior on Iran in exchange for the signing of a 123 agreement, and that there will be opportunities in the future to exercise further leverage if necessary, because each transaction under a 123 agreement must be approved for licensing.[46] Supporters may also see the 123 agreement as a way to encourage Russia to continue pressing Iran on such issues as the Bushehr reactor safeguards. Some argue that engaging Russia on the scientific level would improve transparency and could provide a deterrent to Russian technical cooperation with Iran. Others are reluctant to approve the agreement when questions remain unanswered about the Russian government's control over transfers to Iran's nuclear and missile programs.

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[44] Peter Baker and David Sanger, "Gains for Moscow in Iran deal: U.S. lifts sanctions, allows loophole to win support for resolution," *New York Times*, May 22, 2010.

[45] http://www.access.gpo.gov/bis/ear/pdf/744spir.pdf.

[46] Thomas Graham, "The Friend of My Enemy," *National Interest Online*, April 1, 2008, http://www.nationalinterest.org/Article.aspx?id=17266; Einhorn, Gottemoeller, McGoldrick, Poneman, Wolfsthal, "The U.S.-Russian Civil Nuclear Agreement: A Framework for Cooperation," CSIS, May 2008, http://www.csis.org/component/option,com_csis_pubs/task,view/id,4499/type,1/.