



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

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## Summary

The bilateral nuclear cooperation agreement between the United States and Russia entered into force after an exchange of diplomatic notes on January 11, 2011. 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 The agreement was withdrawn from congressional consideration by President George W. Bush on September 8, 2008, in response to Russia's military actions in Georgia.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 Statement (NPAS) and his determination that the agreement promotes U.S. national security. Under U.S. law, Congress had 30 days of continuous session for consultations with the Administration, followed by an additional 60 days of continuous session to review the agreement. Since it was not opposed by a joint resolution of disapproval or other legislation, the agreement was considered approved at the end of this time period on December 8, 2010.

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 relevant to the debate when the agreement was being considered in the 111<sup>th</sup> and 110<sup>th</sup> Congresses.

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 Statement (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,<sup>1</sup> but in September 2008 rescinded the national security determination following Russian military actions in the Republic of Georgia.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."<sup>2</sup>

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

The agreement permits the export, subject to licensing, of technology, material, equipment, and components for nuclear research and nuclear power production. The agreement does not permit transfer of restricted data. The agreement needs 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.

The bilateral nuclear cooperation agreement between the United States and Russia entered into force<sup>3</sup> after an exchange of diplomatic notes on January 11, 2011. At the entry into force ceremony, U.S. officials emphasized that the agreement would improve cooperation in nuclear terrorism prevention, nonproliferation, and development of new nuclear technologies.<sup>6</sup>

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<sup>1</sup> <http://www.whitehouse.gov/news/releases/2008/05/20080513-1.html>.

<sup>2</sup> 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>.

<sup>3</sup> 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.

<sup>4</sup> 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.

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

<sup>6</sup> "The U.S.-Russia 123 Agreement," Press Release, U.S. Embassy, Moscow, January 11, 2011, [http://moscow.usembassy.gov/pr\\_011111.html](http://moscow.usembassy.gov/pr_011111.html).

## 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.<sup>7</sup> The United States has agreements for civil nuclear cooperation in place with almost 50 countries. Such agreements, known as “123 agreements,” provide the framework and authorization for cooperation, but do not guarantee certain exports, technology, or material. Before significant nuclear exports<sup>8</sup> 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.<sup>9</sup>

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.<sup>10</sup>

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.<sup>11</sup> 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

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<sup>7</sup> 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.

<sup>8</sup> 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.

<sup>9</sup> 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.

<sup>10</sup> 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).

<sup>11</sup> 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.

would contribute to “the growth of clean, safe and secure nuclear energy for peaceful purposes.” The 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.<sup>12</sup>
- 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. Congressional consideration of the agreement ended on December 8, 2010. No joint resolutions disapproving the agreement were adopted, paving the way for entry into force.

## **Legislation in the 110<sup>th</sup> Congress**

Even before the crisis in the Republic of Georgia in August 2008, approval of a U.S.-Russia 123 agreement by Congress was not certain. Legislation both supporting and opposing the agreement was introduced in the 110<sup>th</sup> 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<sup>13</sup> on July 23, 2008. This bill would have approved the U.S.-Russia 123 agreement, notwithstanding

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<sup>12</sup> CRS Report R41219, *The New START Treaty: Central Limits and Key Provisions*, by Amy F. Woolf

<sup>13</sup> The United States-Russian Federation Nuclear Cooperation Agreement Act of 2008.

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 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.<sup>14</sup>

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.”<sup>15</sup> 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.”<sup>16</sup> 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.”<sup>17</sup>

Additional legislation proposed in the 110<sup>th</sup> 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.”

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<sup>14</sup> For example, House Foreign Affairs Committee Republicans press release, August 19, 2008, [http://foreignaffairs.republicans.house.gov/list/press/foreignaffairs\\_rep/081908123.shtml](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.

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

<sup>16</sup> <http://www.whitehouse.gov/news/releases/2008/05/20080506-4.html>.

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

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 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 a 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.<sup>18</sup> The GAO also lists Chairman Henry Waxman and Representative Edward Markey as report requesters. The GAO issued its report in July 2009.<sup>19</sup> 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 111<sup>th</sup> 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

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<sup>18</sup> [http://energycommerce.house.gov/Press\\_110/110-ltr.052208.GAO.123.ltr.pdf](http://energycommerce.house.gov/Press_110/110-ltr.052208.GAO.123.ltr.pdf).

<sup>19</sup> "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>.



time, we will examine the agreement more fully.”<sup>20</sup> Three joint resolutions were introduced in the House, and referred to the House Foreign Affairs Committee, two expressing disfavor and one providing for approval of the agreement:

- On May 21, 2010, Representative Edward Markey and co-sponsor Representative Jeff Fortenberry introduced a joint resolution (H.J.Res. 85) expressing disfavor of the proposed 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 proposed agreement (H.J.Res. 91).
- On June 21, 2010, House Foreign Affairs Committee Ranking Member Ileana Ros-Lehtinen, with Representatives Dan Burton and Edward Royce, introduced a joint resolution that provides for disapproval of the proposed agreement (H.J.Res. 92).

Senate Foreign Relations Committee Chairman John Kerry and Ranking Member Richard Lugar introduced a joint resolution (S.J.Res. 34) that would approve the proposed agreement on June 21, 2010. It was referred to the Senate Foreign Relations Committee. As stated above, no positive action by Congress is required for the agreement to enter into force after the congressional review period expires.

### ***The Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010***

The Comprehensive Iran Sanctions, Accountability, and Divestment Act (CISADA) of 2010 was signed by the President on July 1, 2010 (P.L. 111-195). Section 3 (9) of the bill 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, including its obligations under the safeguards agreement between that country and the International Atomic Energy Agency,” unless the President determines that such transfers would not undermine U.S. nonproliferation objectives.

Section 102, subsection a, of the bill prohibits the 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.

An earlier House 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

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<sup>20</sup> “Chairman Berman responds to Administration’s U.S.-Russia nuclear proposal,” House Committee on Foreign Affairs Press Release, May 11, 2010.

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 cooperate on a variety of nuclear nonproliferation and nuclear energy initiatives, under ad hoc agreements.<sup>21</sup> 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<sup>22</sup> whose report defined an Action Plan for cooperation that led to the bilateral Presidential Declaration on Nuclear Energy and Nonproliferation of July 3, 2007.<sup>23</sup> In an effort to continue this process and as part of the Obama Administration’s “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.”<sup>24</sup> An argument in favor of the agreement is that the United States could gain from Russian advanced fuel cycle research and development experience.<sup>25</sup> 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 and that this would raise proliferation risks.

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<sup>21</sup> See CRS Report RL31957, *Nonproliferation and Threat Reduction Assistance: U.S. Programs in the Former Soviet Union*, by Amy F. Woolf.

<sup>22</sup> “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>.

<sup>23</sup> Text of Declaration on Nuclear Energy and Nonproliferation Joint Actions, July 3, 2007, at [http://moscow.usembassy.gov/st\\_07032007.html](http://moscow.usembassy.gov/st_07032007.html).

<sup>24</sup> “Joint Statement by the U.S. - Russia Bilateral Presidential Commission Coordinators on Commission Progress,” December 31, 2009, [http://moscow.usembassy.gov/st\\_123109.html](http://moscow.usembassy.gov/st_123109.html).

<sup>25</sup> “Business Groups Urge Support of US Russia Nuclear Agreement,” July 11, 2008, [http://www.usaengage.org/index.php?option=com\\_content&task=view&id=473&Itemid=71](http://www.usaengage.org/index.php?option=com_content&task=view&id=473&Itemid=71).

The proposed agreement could provide Russia with access to U.S. nuclear technologies and markets, and would open the possibility of receiving U.S.-origin nuclear materials into Russia for storage or processing. Some argue that the agreement might be construed as a U.S. stamp of approval for Russia's civilian nuclear industry when safety and environmental problems with the Russian nuclear industry remain. 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.<sup>26</sup>

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.<sup>27</sup> Broader proposals to discourage new states from building fuel cycle facilities include the development of multilateral fuel assurances and international fuel service centers.<sup>28</sup> 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.<sup>29</sup> 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.<sup>30</sup> 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.

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<sup>26</sup> Anton Khlopkov, "What Will a Nuclear Agreement with the United States Bring Russia?" *Security Index*, No. 2 (82), Volume 13.

<sup>27</sup> "Akkuyu plant construction to begin in 2011, says Turkish energy ministry," *Platts Nucleonics Week*, May 27, 2010.

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

<sup>29</sup> According to the Atomic Energy Act, this would be considered a subsequent arrangement, under Section 131. Analysts 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.

<sup>30</sup> 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).

## **Nuclear Liability**

For these potential areas of cooperation to be realized, however, nuclear liability coverage for U.S. companies doing business in Russia would need to be clarified. 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).<sup>31</sup> 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 to 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.”<sup>32</sup> 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<sup>33</sup>**

The main focus of U.S.-Russia relations at the beginning of the Obama Administration was the negotiation of a follow-on Strategic Arms Reduction Treaty.<sup>34</sup> 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 energy may have particular value for the bilateral relationship in this context, and that a 123 agreement could be used to influence Russian policies.<sup>35</sup>

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<sup>31</sup> 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.

<sup>32</sup> 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>.

<sup>33</sup> See also CRS Report RL33407, *Russian Political, Economic, and Security Issues and U.S. Interests*, coordinated by Jim Nichol.

<sup>34</sup> CRS Report R41219, *The New START Treaty: Central Limits and Key Provisions*, by Amy F. Woolf.

<sup>35</sup> 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>.

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 does not itself stipulate new programs or collaborative projects, it may have symbolic value and remove a longtime irritant in bilateral relations. Supporters of the agreement with Russia argued that rejecting the agreement could embolden anti-U.S. sentiment and be counter-productive to cooperation in other areas. Critics countered that its symbolic value is a reason not to enact it—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.<sup>36</sup>

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,<sup>37</sup> 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.<sup>38</sup> In June 2010, Russia supported a new U.N. Security Council sanctions resolution (UNSCR 1929). In general, analysts argue that Russian and American views about the 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 were an obstacle to 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

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<sup>36</sup> Nuclear Proliferation Assessment Statement, 2008, 2010.

<sup>37</sup> "Medvedev Likely to Face Problems with Iran," *RIA Novosti*, May 13, 2008, at <http://en.rian.ru/analysis/20080513/107253545.html>.

<sup>38</sup> CRS Report RL34544, *Iran's Nuclear Program: Status*, by Paul K. Kerr.

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) amended 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.<sup>39</sup> Additional details on the proliferation concerns associated with Russian-Iranian cooperation are possibly 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.<sup>40</sup>

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 U.N. 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.<sup>41</sup> 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.<sup>42</sup> Some observers have asserted that removal of sanctions was done in exchange for Russian support for a draft U.N. 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.<sup>43</sup> In March 2010,

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<sup>39</sup> “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>.

<sup>40</sup> 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](http://www.dni.gov/reports/2009_721_Report.pdf).

<sup>41</sup> 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.

<sup>42</sup> 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.”

<sup>43</sup> 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.

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.<sup>44</sup> 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.<sup>45</sup> 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 were 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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<sup>44</sup> <http://www.access.gpo.gov/bis/ear/pdf/744spir.pdf>.

<sup>45</sup> 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/](http://www.csis.org/component/option,com_csis_pubs/task,view/id,4499/type,1/).