Analysis

Russia's Nonproliferation Tightrope

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Abstract

Russia's posture towards nuclear nonproliferation seems increasingly schizophrenic. Over the past several years, Russia has begun to transition from the primary beneficiary of western cooperative nuclear assistance, to a G-8 partner at redressing other troubled nuclear regions. Moscow also has assumed leadership roles working with the International Atomic Energy Agency (IAEA), the U.S., and states interested in boosting nuclear power generation to implement creative solutions to reconcile commercial opportunities with nonproliferation objectives. Yet, the Kremlin has simultaneously accelerated strategic nuclear modernization, both to compensate for travails at the conventional level and to counter deployment of ballistic missile defenses in Europe. Moreover, its bullish pursuit of international nuclear commerce combined with the preoccupation for independently flexing its energy muscles, either by intention or not, has stoked controversial foreign nuclear activities and frustrated western efforts to confront them.

Moscow Pursues Contradictory Goals

Although a far cry from the strategic contradictions precipitated by the domestic chaos during the initial post-Soviet years, Russia's nonproliferation posture nonetheless tests Moscow's diplomatic skill and international goodwill. The Kremlin today must walk a tightrope between demonstrating leadership on nonproliferation issues and indulging strategic temptations, both without alienating needed foreign partners or customers. Others, however, must avoid over-reacting to Moscow's parochial gambits, so that mutual benefits of cooperation on first-order security interests are not lost amid mounting annoyance and acrimony.

Not surprisingly, Putin's nuclear diplomacy raises a set of profound questions. First, what is Russia up to? What are the dimensions to its policies, and how does it strive to reconcile competing impulses? Second, how effective is Russia's posture? Can it sustain the delicate balancing act? Finally, in light of these motives and constraints, how can we assess Moscow's renewed activism in the commercial nuclear and nonproliferation spheres? What may be gained (or lost) from extending cooperative engagement with Russia? Answers to these questions are critical for advancing international partnership with Russia, as well as for strengthening the nuclear nonproliferation regime.

Moscow's Two Nuclear Faces

Throughout the Cold War, the Soviet Union served as a bulwark against nuclear proliferation. Its collapse and the protracted transition that ensued, however, overtaxed Moscow's capacity to control its nuclear inheritance, let alone to remain a pillar of the global nonproliferation effort. Instead, Russia became associated with the problems of post-Cold War nuclear proliferation, and a supplicant for cooperative assistance to arrest possible leakage of indigenous weapons technology, fissile material, and scientific expertise from the vast and exposed Soviet nuclear complex.

With the country's economic and political resurgence under President Putin, Russia's posture noticeably started to change even before the 9/11 terrorist attacks. Acknowledging Russia's vulnerability as a "frontline" state, Putin pronounced nuclear terrorism as the greatest security threat facing the international community. The 2006 "White Paper on Nonproliferation" targeted transnational nuclear networks, as well as weak, poorly coordinated, and instrumentally motivated export controls (both national and multilateral) as priorities for strengthening the nonproliferation regime. Rhetoric was matched by action, as Russia served as a constructive member of the 6-Party talks that negotiated reversal of North Korea's enrichment and reprocessing programs. Moscow also pursued a soft-landing to the stand-off between the U.S. and Iran over the latter's nuclear energy program by proposing to create a joint venture for enriching uranium on Russian soil and to take back related spent nuclear fuel in return for Tehran's promise to forgo these indigenous programs. By the same token, the Russian government took strides towards invigorating cooperative nuclear assistance with the U.S., launching a "Global Initiative to Combat Nuclear Terrorism" to improve cooperation on law enforcement against nuclear terrorists, and co-signing recently the fifth "Bratislava Report" to continue progress towards converting the world's research reactors from using highly enriched uranium to more proliferation resistant low enriched

uranium (LEU). Under Putin's direction, legislation was passed to give force to a new "umbrella agreement" clarifying legal liability for accidents encountered on assistance projects. This was coupled with agreement between the Department of Energy and the Russian Federal Agency for Atomic Energy (Rosatom) on key milestones for completion of planned security upgrades at warhead and weapons-usable nuclear material sites by the end of 2008, and maintenance of nuclear security and accounting systems solely by Russian resources by early 2013.

Yet, Moscow's simultaneous steps towards revitalizing the nuclear complex have sent conflicting signals. The Russian leadership, for example, affirmed a lower use threshold for nuclear weapons and limited strike options as part of its refined thinking on deterrence, as well as voiced strong determination to modernize all legs (land-, sea-, air-based) of the strategic triad. The government also streamlined budgetary outlays for development and deployment of modern ICBMs, SLBMs, a nuclear submarine class, and a nuclear cruise missile, as well as extended the service-lives of several other systems and broached resumption of around-the-clock strategic air patrols. At the same time, Moscow endorsed Iran's essential right to nuclear power, going so far as to obstruct harsher sanctions on Tehran by the U.N. Security Council. Against this backdrop, the Kremlin's general enthusiasm for the current nuclear energy renaissance, though not a violation of international nonproliferation norms per se, has raised concerns about Russia's mixed motives. In particular, the Putin regime set its sights on increasing domestic nuclear capacity at least 2.3 times by 2030 to cover over 25 percent of the country's electricity demand, as well as on exporting upwards of 60 nuclear power plants, including floating reactors, and importing foreign-origin spent nuclear fuel over the next two decades. To realize these ambitions, the state company, Atomenergoprom, was established in spring 2007. Modeled on the predatory gas monopoly, Gazprom, this vertically-integrated state corporation was formally charged with uniting commercial components of the nuclear complex to aggressively pursue competitive advantages at growing domestic power generation output, developing new nuclear fuel initiatives, leveraging non-governmental ownership of civilian nuclear assets, and expanding reactor construction worldwide. This was complemented by the October 2007 reorganization of Rosatom into a unified state corporation with overall responsibilities for merging regulation of military, industrial, and scientific enterprises of the nuclear complex, as well as for supervising radiation safety and attracting private investment to propel the state's nuclear program.

Squaring Circles?

Though committed to pursuing multiple objectives, Moscow's policies recently have focused on reconciling strategic opportunism with nonproliferation leadership. This is manifest in the indirect, quiet, and proactive approaches to dealing with Iran's nuclear ambitions and advancing the multilateral dialogue on nuclear fuel supply guarantees.

On the one hand, Putin distanced Russia from the gathering international confrontation with Iran. He publicly questioned U.S. and European concerns about the latter's intentions to develop nuclear weapons, and blocked a third set of tougher U.N. sanctions until the IAEA reports on Tehran's past nuclear activities by the end of 2007. During his historic October 2007 visit to Iran, he reassured his hosts of Russia's commitment to complete construction of the Bushehr reactor and his belief in their peaceful objectives. Assuming a "no news is good news" orientation towards Tehran's plans for nuclear weapons, Putin condemned talk of a western military strike as "disproportionate and incommensurate" with Iran's actions, as well as trumpeted progress towards denuclearizing North Korea as the model for stepping back from the brink.

On the other hand, by the end of 2006 Russia began quietly to ratchet up pressure on Iran to comply with international demands for transparency. Noticeably miffed by Tehran's snubbing of earlier offers to provide sub-contracting services for Iran's uranium-enrichment, Putin endorsed two rounds of moderate sanctions imposed by the U.N. Security Council. This was followed in 2007 by construction delays at the Bushehr reactor that coincided with escalation of American and French pressure on Tehran. Frustrated by Iran's failure to meet more than 60 percent of its financial obligations by the end of 2006 and by subsequent shortfalls collecting on the agreed $25 million per month, as well as by attendant troubles with receiving parts from third parties, the Russian project contractor, Atomstroyexport, openly questioned the profitability of the deal and pushed back the operational launch of the reactor by a year to late 2008, despite having completed over 90 percent of the construction. Although dismissive of Iranian accusations of being in political cahoots with the west, Putin nonetheless refused to specify when Russia might supply the needed nuclear fuel, on grounds that the international seals and safeguards necessary for transport have not been readied. Despite Tehran's vehement rejection of an outstanding debt and lures of additional reactor contracts to Russia to expedite technical support, Moscow has continued to drag its feet. By presenting Russia as a sober-minded commercial and political partner for Tehran, while indirectly slowing development of the Bushehr reactor, Putin has sought to

position Russia to wrest commercial concessions from Tehran and garner greater international stature as a constructive mediator.

Similarly, Moscow took the initiative to mitigate potential proliferation externalities attendant to the projected global expansion of nuclear commerce. Emboldened by the IAEA's promotion of multilateral guarantees for nuclear fuel service, Putin offered to create on Russian soil the first of a series of enrichment centers under international safeguards. Throughout 2006, this evolved into a workable plan for converting the under-utilized Angarsk Electrolysis Chemical Combine into the first "non-discriminatory and transparent" enrichment center, open to all states intent on developing nuclear power that lack the indigenous capability and are members in good standing of the Nuclear Nonproliferation Treaty. Russia urged potential partners to accept the IAEA's "additional protocol" for more stringent safeguards, and in October 2007 Putin signed a bill to ratify such an agreement with the international watchdog as an imprimatur. The center marked a step towards not only boosting business for national firms but enhancing confidence in enrichment supply via inter-governmental and commercial contracts that would allow members to invest and share in ownership, management, and profits, without providing foreign access to sensitive enrichment technology. The first deal was inked with Kazakhstan in May 2007 for joint uranium mining, nuclear reactor development, and supply of LEU for Kazakh fuel fabrication. This was followed by proposals to Ukraine, with expectations that similar discussions with Armenia, Belarus, South Africa, and the members of the Shanghai Cooperation Organization would soon follow. In October 2007, Russia offered to place under international managerial control a reserve of $300 million worth of LEU by the beginning of 2008 to jump-start the IAEA's promotion of an international "fuel bank." Despite ambiguities concerning future funding, membership eligibility, administration, and environmental and safeguards procedures, the international community, led by the IAEA and U.S., welcomed the center as integral to an emerging multilateral framework for implementing workable nonproliferation measures to stem the diffusion of dual-use enrichment and reprocessing technologies among nuclear power-seeking nations.

Beyond the Kremlin's Grasp

The success of this delicate diplomatic maneuvering, however, hinges ultimately on factors beyond the Kremlin's direct control. Although the movement towards an international showdown with Iran presents opportunities to carve out an independent role, Russia possesses few reliable levers to direct the sides towards a peaceful resolution. More generally, Moscow lacks the economic muscle to assert leadership over international nuclear commerce and nonproliferation. Russian suppliers do not enjoy market power at the front- or back-ends of the nuclear fuel cycle, and also face manufacturing bottlenecks for key technologies, such as reactor turbines and centrifuges, that together constrain immediate prospects for leveraging commercial transactions for political effect. As evidenced by the September 2007 deal for the delivery of 4,000 tons of uranium from Australia, Russia will remain dependent on imports (with no control over prices) to meet the expected rise in domestic demand, let alone to satisfy ambitions to fuel foreign reactors. Similarly, the joint venture with Kazakhstan is limited by the latter's commitments to diversifying uranium exports and delving deeper into fuel assembly markets tailored primarily to western reactor standards. As with other commercial nuclear deals with Kazakhstan, Kyrgyzstan, and Ukraine, as well as with the earlier program to import foreign-origin spent nuclear fuel, Russia is commercially handcuffed at imposing responsibilities on its partners and exploiting these arrangements to secure favorable debt-equity stakes in foreign enterprises. Together with international concerns about Russia's willingness to meet the IAEA's safeguards requirements, as well as about promises not to divert imported uranium and related technologies to military purposes or to withhold deliveries for political reasons, the economics of global nuclear commerce do not augur well for Moscow to dictate the strategic terms for engagement.

The recentralization of the nuclear complex also has not necessarily conferred greater state control. Redundant and ambiguous lines of authority between new agencies tasked with managing the nuclear sector create conditions ripe for rivalry between federal and regional offices, civilian and military bureaucracies, and the security services and diplomatic corps. This, in turn, is likely to perpetuate problems associated with unreliable foreign access to Russia's nuclear sector and funding shortages for key non-commercial activities, such as nuclear safeguards, safety, and environmental protection. It also is not clear that state subsidies and opaque corporate governance structures can allay anxieties facing minority private investors or improve the profitability of the nuclear industry. Moreover, corruption remains a problem across the nuclear fuel complex, as evidenced by constant complaints of "vanishing" investment funds, bribe-taking and abuse of office by official managers, and the rising incidence of "non-accidental death and desertion" among guard units assigned to the nuclear cities. In short, practical gaps between centralization and control limit the Kremlin's institu-

tional wherewithal to balance its nuclear commercial and nonproliferation ambitions.

The Way Ahead

Upon closer inspection, there is both more and less to the Kremlin's nuclear nonproliferation posture. There is more in the sense that the leadership has undertaken concrete measures to parlay the country's economic, political and strategic resurgence into grandiose commercial pursuits while maintaining sincere commitments to containing the diffusion of nuclear weapons and fissile material. At the same time, there is less to Moscow's statecraft and capacity to exert stewardship over the nuclear policies of other states, given deep-seated market and institutional barriers. Despite Moscow's strategic activism, it can neither dominate regional decision-making or markets, nor impose via administrative fiat a predatory nuclear leviathan on par with its presence in the gas sector.

Yet, Moscow's predicament offers prospects for revitalizing global nonproliferation. Irrespective of the constraints on unilateralism, the international community stands to benefit from engaging Moscow in the search for creative solutions to regional problems and credible nuclear fuel service guarantees. By forging new partnerships with Russia to extend its newfound resources and vast experiences with cooperative nuclear assistance to other troubled regions, the U.S. and others not only can avert costly nuclear showdowns that advance their own interests, but can offer mutually advantageous opportunities for Russia to reclaim its stature as a global leader of nonproliferation.

About the Author

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Recommended Reading

Elena Sokova & Cristina Hansell Chuen, "Nuclear Power Broker," *Bulletin of the Atomic Scientists* (September/October 2007), pp. 51–54.

Related Yearbooks

- The United Nations DISARMAMENT YEARBOOK, Office for Disarmament Affairs
  New York, 2007
  http://disarmament2.un.org/yearbook-2006/DY2006.pdf

  The Office for Disarmament Affairs draws your attention to its website at http://disarmament.un.org where free access is available to the electronic version of the 2006 Yearbook, as well as the archive annual editions from 2002 to 2005.
  Among the many other electronic resources, you will find regularly updated information on various disarmament issues, the departmental database on the status of disarmament and arms regulation agreements, and electronic versions of all the resolutions and decisions covered in the Yearbook.

- SIPRI YEARBOOK 2007: Armaments, Disarmament and International Security, Publisher: Oxford University Press, ISBN 978-0-19-923021-1 - hardback, 752 pp.
  http://books.sipri.org/product_info?c_product_id=346

  The 38th edition of the SIPRI Yearbook analyses developments in 2006 in security and conflicts; military spending and armaments; and non-proliferation, arms control and disarmament, with extensive annexes on arms control and disarmament agreements and a chronology of security- and arms control-related events.