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The Elusive Peace Dividend



As Republicans and Democrats battle over the latest federal budget, and issues such as health-care coverage and education dominate the news headlines, until recently a looming problem had been getting scant attention in Washington. The HEU "Megatons to Megawatts" program between the U.S. and Russian governments could soon be in jeopardy over the price to be paid for the SWU component.

This is especially disconcerting given the volume of rhetorical grandstanding by various politicians when the HEU agreement was first signed in the early 1990s.

There is no question that this historic HEU blending program has been a success, despite occasional setbacks. Russia's Ministry of Atomic Energy (Minatom) has demonstrated the seriousness with which it approached the project by working over the last five years to meet all agreed-upon targets for production volume and quality, and by coming close to completing the deliveries on time. This is a notable achievement given the seemingly insurmountable problems with the Russian Customs bureaucracy and the unexpected obstacle of having the uranium feed component dropped back in its lap. By the same measure, USEC, as the U.S. Executive Agent, has shown good faith in implementing a difficult governmental program in the midst of its own privatization and wrenching organizational change. Although the two entities are still battling in the Department of Commerce over Russian access to the U.S. enrichment market, it is remarkable that in the fifth year of deliveries of LEU derived from HEU, the maximum level of annual blending has been reached and the program appears to be on solid footing. There is much to be proud of on both sides of this transaction.

USEC has an interest in controlling the HEU SWU and should be willing to pay something to do so. But, from USEC's perspective, it cannot justify purchasing almost half the SWU it delivers to customers at prices well above its production cost, or more precisely, what its production costs would be if it did not have to purchase the Russian SWU in the first place. (USEC is not currently operating at its optimal production rate due to the large quantity of HEU SWU it is purchasing, and this is reflected by higher production costs.) There is nothing to be gained by the government in trying to force USEC to absorb costs of administering the HEU deal that exceed USEC's ability as a private company. Such an approach would create uncertainty in the implementation of the deal. Clearly, maintaining the security of the HEU program is the responsibility of the U.S. government, not private industry. For too long the government has appeared to want to dump off any problems with HEU on the commercial markets, forgetting that private companies are required to focus on profits, not government service.

We have already seen this happen with the feed component. The original government-to-government agreement called for the U.S. to purchase enriched uranium from Russia, not just the SWU component. With some fancy footwork following the 1993 Clinton-Yeltsin summit in Vancouver, the U.S. side managed to slip out of that requirement, replacing it with a promise in the implementing agreement to purchase the feed sometime in the next 20 years. As anticipated, this eventually led to a breakdown in the mechanics of the transaction, due to Russian capital-flight regulations that required payment for the SWU and feed components simultaneously prior to export. This separation of the feed and SWU payments caused problems with Russian Customs authorities and held

Nonetheless, this program could be headed for a serious confrontation over the price to be paid for the SWU component. At the time the deal was struck, the parties envisioned annual price negotiations with Cameco, Cogema and renegotiations to accommodate changes in the marketplace. Perhaps anticipating the possible delays and uncertainty that could result from this approach, USEC and Minatom, with the support of the U.S. government, instead agreed to fix the SWU price for a five-year period, with escalation. This decision brought some stability to the deal and allowed LEU deliveries to continue without the threat of delays over unresolved pricing terms. (Delays still occurred because of the aforementioned lack of resolution on the feed side, but this was clearly not the fault of USEC.) The SWU price paid by USEC was perhaps 10% below market prices when the deal was struck, but with escalation and the corresponding decline in spot and long-term SWU prices, it is now at a level well above the current market. USEC and its shareholders have no choice but to absorb the difference. But what was once a government corporation dutifully carrying out a government program is now a private company that must answer to shareholders who probably aren't interested in having their investment subsidize a U.S. government effort, no matter how noble.

This is not to say that a new, lower SWU price for Russia is unreasonable. If market prices remain low, Russia will eventually have to accept such a price beginning in 2002, when the current contract expires. Competition from the European producers, along with USEC's attempts to respond to those competitive pressures, have pushed spot and long-term SWU prices down some \$15 per SWU over the last five years. With the exception of an inventory of Kazak EUP that is still blocked from the U.S. market, the secondary market for enrichment has all but disappeared, leaving competition among USEC, Urenco and Cogema as the main driver of prices. Seeing nuclear

up some of the LEU shipments. Furthermore, it forced Minatom to negotiate its own sale of the feed component, eventually culminating in the four-year opera that was the HEU feed Nukem. Now those private companies are parties to the feed disposition, and, while in it for defensive reasons, they are clearly required to guard their bottom lines before acting in the national security interests of the U.S. government.

On the surface, the solution to this problem appears simple. Beyond the term of the currently negotiated prices, Russia should agree to prices that are a realistic reflection of the SWU market at the time of delivery. USEC should pay a price roughly equal to its cost of production, so that its shareholders do not absorb the extra costs of administering a major government program. And the U.S. government should commit the funds to support the difference between these two numbers. However, this is complicated by other factors. First, USEC is seeking relief over the next two years, a time when the commercial price for the HEU SWU is set. In this way, USEC finds itself in a situation that most of their customers face, paying a contract price that is higher than the market. Also, USEC is handicapped not just by its current contract with TENEX, but by the requirement that it operate two inefficient plants and other constraints. This raises the issue of whether there are other mechanisms to address this problem.

Whatever happens, it is clear that the government must provide a long-term fix. We should not have to witness the sight of politicians claiming to heroically "rescue" the HEU deal every few years when in fact it is their job to put it on a solid footing in the first place. Private industry can and has administered this deal admirably, but cannot be expected to do so when the commercial burdens are in conflict with their own stakeholder interests.

plant consolidation, threats of politically driven plant shutdowns in some regions, and the generally negative near-term outlook for nuclear power, it is no surprise that these three companies are cutting prices and fighting for market share. In fact, in some ways it is surprising that this aggressive competition did not start sooner. Russia is aware of this dynamic even though it still faces protectionist obstacles in its access to U.S. and European customers.

Between now and 2002, USEC argues that it should not have to pay more than its "marginal" production cost for Russian SWU, a cost that it contends is well below market price. However, Minatom is unlikely to accept a SWU price that is significantly below the market price, even after 2001, and certainly would not entertain such a price for the SWU already under contract. The HEU deal has always been politically sensitive in Russia, particularly among ex-communist hardliners who see a birthright being sold off to the age-old enemy. With the approaching election and end of the western-friendly Yeltsin era, this is no time to give certain factions in Russia credibility by proposing commercially insulting terms.

Significant Events in the HEU Deal	
10/91	U.S. and Russian government officials first discuss the concept of buying blended weapons material for commercial use.
2/93	Government-to-government agreement signed to cover purchase of 500 MT of HEU; Techsnabexport and USEC named as Executive Agents.
5/93	Minatom's Mikhailov signs implementing contract with DOE providing for payment for feed component only "as used or sold", a change which would lead to later delivery problems.
1/94	USEC and Tenex sign final implementing agreement, transferring contract from DOE to USEC. Deliveries expected by June of 1994, but they will be delayed by one year.
10/94	USEC and Tenex fail to agree on SWU prices, and negotiations continue into 1995.
6/95	First shipment of LEU from HEU arrives in the U.S., as negotiations continue over the SWU price and feed disposition.
11/96	New agreement finalized whereby SWU price for the next five years is established.
7/98	News of DOE uranium transfers to USEC causes concern among Russian officials over ability to sell feed component.
10/98	Congress allocates \$325 million to purchase existing inventory of unsold HEU Feed.
3/99	Feed agreement signed between Tenex and consortium of western companies.

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