

A New Approach to Civil Nuclear Cooperation Policy

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Good day, everyone, and thank you for the opportunity to speak to you.

In the nonproliferation business, we usually think more in terms of *denying* opportunities than of creating them. Specifically, it's our job to deny would-be proliferators — whether state or non-state actors — the opportunity to develop or otherwise acquire weapons of mass destruction, delivery systems, or advanced conventional weapons. It's also our job to deny the organizers and operators of proliferation-facilitating networks, as well as any who would evade U.N. Security Council sanctions, the opportunity to profit from trafficking in destabilizing technologies or from helping outlaw regimes evade accountability.

Denying bad guys dangerous tools, in other words, is our core mission, which is why the motto of my bureau at the State Department — the Bureau of International Security and Nonproliferation — is *Ad Minas Arcendas*, which is Latin for “to prevent threats.” For that is exactly what we do.

From time to time, however, this job of denying others opportunities for mischief coincides with the chance to *create* opportunities for American industries and workers. And that's very much the case with civil nuclear cooperation agreements, which can be an important tool for strengthening strategic relationships with partners, enhancing energy security, raising international nonproliferation standards, and promoting U.S. civil nuclear exports. And that's my topic for today.

I. *The Opportunity and Challenge of Cooperation Agreements*

Under United States' law, U.S. suppliers can only sell nuclear power fuel or equipment abroad subject to a civil nuclear cooperation agreement, often referred to as a “123 agreement” after the relevant section of the Atomic Energy Act. For this reason, a 123 agreement — which my bureau is responsible for negotiating — is an important tool for enhancing the commercial prospects of the U.S. civil nuclear sector. Without a 123 agreement, U.S. suppliers cannot export nuclear material, equipment, or significant reactor components, U.S. industry cannot compete in foreign markets, and Americans forego job opportunities. So with these agreements, we lay the foundations for U.S. competitiveness in this critical, high-technology arena.

And here's the best part: civil-nuclear cooperation agreements are *also* one of the strongest tools we have to promote nonproliferation as a government, because the Atomic Energy Act requires the highest standards in the world when it comes to the nonproliferation protections required with the United States' civil nuclear cooperation partners. These statutory requirements are enormously important, for they ensure that all U.S. 123 agreements legally obligate our partners to observe specific standards in such areas as peaceful use, International

Atomic Energy Agency (IAEA) safeguards, physical protection for nuclear materials, and prohibitions on enriching, reprocessing, or transferring U.S.-obligated material and equipment without our consent.

Even beyond these requirements “baked in” to *all* 123s by U.S. law, the State Department also works hard to negotiate as many additional nonproliferation assurances as we can, such as political commitments to rely upon commercial fuel markets rather than explore indigenous uranium enrichment and reprocessing services, consistent with U.S. policy that seeks to limit the further proliferation of these technologies. In two cases, in fact — albeit, alas, pretty unique ones, since they involved one partner that already had domestic legislation prohibiting the activity in question, and another that simply lacked any alternative source of supply at all, thus giving us unique leverage — U.S. negotiators managed to get agreement on a *legally* binding commitment not to engage in any enrichment or reprocessing. We have also in recent years been going beyond the requirements of the Atomic Energy Act in ensuring that our civil-nuclear cooperation partners adhere to the IAEA Additional Protocol, which we consider to be the *de facto* international safeguards standard, as a condition for nuclear exports under those agreements.

What ends up being possible necessarily varies, of course, but *whatever* the negotiated terms, 123 agreements signed by the United States represent the global standard for nonproliferation-related nuclear supply “best practices,” and *always* protect nonproliferation equities better than the conditions attached by any other nuclear supplier. There is no case, in other words, in which a U.S. 123 agreement with any given recipient will not promote nonproliferation values better than that same recipient cutting a deal with another, competing supplier state. That’s why we view 123s as such a win-win outcome: U.S. industry and American workers have the chance to spread their wings in the international marketplace, and global nonproliferation standards improve in direct proportion to our suppliers’ commercial success.

Civil nuclear cooperation under sound nonproliferation conditions is also a win for our overseas partners. Not only do they gain access to the benefits of peaceful uses of U.S. nuclear energy, science and technology; they also develop the capacity to do so sustainably and responsibly, building confidence that such cooperation will not be misused — whether deliberately or inadvertently — to contribute to the proliferation of nuclear weapons. Widespread sharing of the benefits of nuclear power simply would not be possible without a firm foundation of nuclear nonproliferation measures built upon the Nuclear Nonproliferation Treaty, the IAEA, and the Nuclear Suppliers Group (NSG).

On the other hand, that “virtuous circle” can also work the other way. If we are unable to get a 123 in place — such as if we chase the “perfect” answer so intently that we prevent getting any deal at all by asking unacceptable terms from our would-be cooperation partners — U.S. industry loses the chance to compete *and* nonproliferation loses too, since a partner that goes with the foreign competition is not subject to the obligations we place in our agreements.

Nonproliferation and a competitive U.S. civil nuclear export sector are thus mutually dependent and mutually reinforcing goals for the United States. Because the conditions

contained in 123s apply to nuclear material, equipment, and significant reactor components *transferred* subject to the agreement, we will see neither economic nor nonproliferation benefits if U.S. suppliers fail to make the sale. This raises the specter of a “vicious circle” of problems, with the competitiveness of U.S. industry being highly dependent upon the opportunities created by 123 agreements, but with our 123s — especially given their conditionalities — proving less attractive to would-be partners as U.S. industry competitiveness wanes, and with fewer recipients actually *adopting* nonproliferation “best practices” as foreign competitors with deliberately lax proliferation standards gain market share at our expense. That is clearly a lose-lose situation, both for the United States and for the global nonproliferation regime.

And that is why civil nuclear cooperation agreements are so important.

II. *Shifting Terrain*

For a long time, we managed to stay on the win-win side of the ledger. In the first three or four decades of international nuclear trade, the United States was the undisputed leader. American companies had the overwhelming majority of global market share, and this dominance ensured that the U.S. government was well-positioned to achieve its nonproliferation policy objectives through 123 agreements with civil nuclear partners.

In the last quarter century, however, the situation has changed, and the U.S. nuclear industry now faces significant headwinds. A number of other countries — and their state-owned enterprises — have emerged as competitors in the global market, and U.S. market share has decreased dramatically. Some competitors are political allies, such as France and the Republic of Korea, while others are geostrategic competitors such as Russia and China.

Irrespective of country of origin, however, the key distinction between U.S. nuclear suppliers and those from almost everywhere else is that in the United States, the nuclear industry is privately owned and operated, and not part of the government. By contrast, in France, South Korea, Russia, and China, the state either fully or partially owns the nuclear industry players with whom private sector U.S. suppliers compete, and it provides massive financial support and exerts industrial policy controls that our system of government lacks. When the naked power of foreign governments is marshalled in support of policies designed to take market share from private U.S. firms, those American firms have indeed suffered — creating the risk that the whole process will tip over into lose-lose dynamics in which both the U.S. nuclear industry *and* the cause of global nonproliferation suffer.

Worse still, it’s not just about economic competitiveness and nonproliferation. Russia and China also use reactor sales by their heavily state-supported nuclear industries as a geopolitical tool to deepen political relationships with partner countries, to foster energy dependence by foreign partners, and sometimes even to use predatory financing to lure foreign political leaderships into “debt traps” that give Beijing or Moscow leverage that it can exploit later for geopolitical advantage. (They also market using a “build-own-operate” model that may purport to absolve the host country from any regulatory responsibilities, thereby increasing the difficulties of mitigating a nuclear accident.) In fact, the leverage resulting from such civil-

nuclear relationships with China and Russia is designed – and often used – to advance the strategic goals of these adversaries to the detriment of U.S. interests and those of our allies.

Such debt traps are a worrisome new development. It was debt entanglement, for instance, that allowed China to take out a 99-year lease on the Sri Lankan port of Hambantota — essentially replicating, with remarkable irony, the very terms that Chinese leaders themselves spent generations decrying as exploitative imperialism in the form of the British Empire’s 99-year lease of the New Territories of Hong Kong. China uses various means to help build itself such “neo neoimperial” footholds, but civil-nuclear relationships are one of them. For their part, the Russians — who refuse to subscribe to the Organization for Economic Cooperation’s Nuclear Sector Financing Guidelines, and who have suppressed nonproliferation standards in the supply of nuclear reactors and material — are hardly better. Russia exerts influence in multilateral nonproliferation fora to stall progress on the evolution of safeguards and export controls, ensuring the global bar stays fixed, while the strategies and tools available to would-be proliferators continue to advance.

The fact that nuclear suppliers such as China and Russia support their objectives through deliberate laxity in the nonproliferation standards they ask of nuclear cooperation partners as a tool of competitive advantage against *responsible* suppliers such as the United States makes this all the more worrisome, even shameful. Both are members of the Nuclear Suppliers Group, which was established to raise export control standards and ensure that commercial incentives would not outweigh nonproliferation objectives and avoid a race to the bottom in which suppliers dilute those standards to gain a commercial advantage, but their actual support for these ideals is obviously not as strong as it should be.

III. *Helping Meet the Challenge*

A. *Rejecting “Business as Usual”*

So on the assumption that we cannot continue to accept “business as usual” on such contrived and manipulative terms — and informed by the clear commitment made in the U.S. National Security Strategy to push back against competitive strategies of the revisionist powers of China and Russia that seek to disadvantage and displace U.S. power in the world — what are we doing to help fight back?

Well, one way is to cut off U.S. sources of some technology that state-owned Chinese nuclear entities have been using in their efforts to compete against our companies. We’ve had a new 123 agreement with China in force since 2015, but we’ve also now learned a lot about how China has been using engagement with the U.S. nuclear power industry for technology that it intends to use to compete against us — crimes of technology theft, for instance, for which the state-owned company China General Nuclear Power Group currently stands under indictment in a U.S. court. We’ve also learned a lot about how the Chinese government is engaged in a systematic effort to divert civilian nuclear technology, including know-how from the United States, into projects supporting its military build-up and its territorial ambitions in the South China Sea. Accordingly, October 2018, [the United States announced a new policy](#) that dramatically cuts back civil nuclear technology transfers to China.

Another way we're responding to these threats is to step up our diplomacy in urging other nuclear suppliers to insist upon the highest standards of safety, security, and nonproliferation in their own civil nuclear cooperation relationships — including by requiring, as we ourselves do, that recipient states have the IAEA Additional Protocol in force, to provide reassurances against the absence of undeclared nuclear activity. We also regularly urge suppliers to consider imposing limits on partners' ability to enrich uranium and reprocess plutonium. And we are working to build “coalitions of caution” in the nuclear business by calling attention to the dangers of nuclear cooperation with Russia and China, both for would-be recipients and for industry partners, and by working with like-minded suppliers to develop joint approaches to counter those two countries' destabilizing and predatory behaviors.

In *fora* such as the NSG and the NPT review cycle, we are also emphasizing the principle of “responsible supply” — urging others to come together with us to insist that *all* nuclear suppliers require nuclear safeguards, safety, and security “best practices” from the states with which they have cooperation agreements. No longer should suppliers be able to use proliferation *irresponsibility* as a marketing tool.

We will also continue to work with NSG partners to ensure that multilateral export control lists are properly updated to ensure that they address advanced nuclear technologies and emerging technologies with potential dual-use applications. And we are working in the NPT process to raise awareness about — and to find ways to advance — the peaceful sharing of nuclear technology, as well as to protect and advance the global nonproliferation regime that provides the foundation upon which the continued availability of such benefits depends.

B. *New Nuclear Cooperation MOUs*

With regard to U.S. nuclear cooperation, the State Department is stepping up efforts to approach our 123 agreement diplomacy in a genuinely strategic way — not only, as before, to strengthen nonproliferation protections in a specific country or region or to help U.S. firms take advantage of market opportunities, but also to help develop *new* opportunities to advance U.S. strategic competitiveness. A full-fledged nuclear cooperation partnership can lead to the establishment of political and economic ties lasting as long as 50 or 100 years, and can be the catalyst for additional cooperation between governments on many other national security and foreign policy issues. Our diplomatic outreach on civil nuclear issues can thus serve strategic interests as well as economic ones, helping us build and mature relationships that will strengthen mutual prosperity and help ensure the security and autonomy of partner governments around the world against the designs of predatory revisionists.

As I have described, 123 agreements are a critical part of this mix. But they need not be viewed as the *only* tool, for not all countries that wish to develop better civil nuclear relationships with the United States will necessarily need to start that relationship with a 123.

To help provide an *additional* way to catalyze and nurture cooperative relationships, we are working to expand the use of less formal, non-binding bilateral political arrangements more akin to a memorandum of understanding (MOU) than to a full 123. Such nuclear cooperation

MOUs — or NCMOUs — would not suffice for actual power reactor projects, of course, which would still require a traditional 123 agreement. But a country weighing the *possible* development of a nuclear power program could use a less formal instrument to build strategic ties with the United States, its experts, industry, and cutting edge researchers about how best to tailor future opportunities to its specific needs. We would use these ties to help states build their own infrastructure for the responsible use of nuclear energy and technology and adopt best practices in nuclear safety, security, and nonproliferation, including independent regulatory oversight.

In such ways, these MOUs could establish the basis for a broader, strategic relationship between the United States and those countries considering civil nuclear energy. Working with our partners at the Departments of Energy and Commerce, the Nuclear Regulatory Commission, and other U.S. departments and agencies, such MOUs could open up new opportunities for all parties, laying the foundation for making partner countries fully prepared to take advantage of the emerging technologies and coming innovations in reactor design and other areas that are being pioneered in the United States, and to do so under the highest standards of safety, security, and nonproliferation. These foundations could provide valuable opportunities both for U.S. industry and for beneficiary states alike, for these are arenas in which the *future* of civil nuclear competitiveness is likely to be decided, and that are the pathfinders for how the benefits of peaceful uses of nuclear energy will be shared over the next century. We envision these NCMOUs as important tools to open doors and allow the U.S. government to build ties with foreign counterparts that will position all of us to take advantage of such opportunities together.

IV. *Conclusion*

These innovations, of course, are not panaceas, nor do we intend for them to take the place of the robust, binding 123 agreements that underpin our civil nuclear commerce. But we do think they can help, and we are committed to using all our diplomatic skills to help lay the foundations for future “win-win” answers – answers in which: (1) U.S. industry and government experts carve out critical roles at the cutting edge of the civil nuclear business; (2) these emerging technologies make cooperation with the United States attractive and even essential; (3) American jobs in this sector boom and U.S. industry competes successfully even against foreign “national champions” that benefit from massive state subsidies and state-sponsored technology theft; and (4) we work together with our international partners to share the benefits of nuclear technology ever more widely, and ever more *responsibly*, under state-of-the-art “best practices” in nuclear safeguards, safety, and security.

Thank you.