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Monterey Institute of International Studies  
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## **The Future of International Civil Nuclear Cooperation**

**Testimony**

**of**

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## **The Future of International Civil Nuclear Cooperation<sup>1</sup>**

Chairman Royce, Ranking Minority Member Faleomavaega, and Members of the Committee, thank you for the opportunity to testify today on the Future of International Civil Nuclear Cooperation.

Pursuant to guidance from the Committee's staff, I will concentrate on the pending U.S.-Vietnam Agreement for Cooperation in the Peaceful Uses of Nuclear Energy. The Agreement has been drafted pursuant to Section 123 of the U.S. Atomic Energy Act and is often referred to informally as a "123 Agreement." Of particular importance for the Committee's deliberations is the treatment of three issues in the Agreement:

- The possible future enrichment of uranium or reprocessing of spent fuel by Vietnam (which could permit the production of nuclear-weapon-usable material);
- Vietnam's acceptance of enhanced International Atomic Energy Agency (IAEA) inspections over the country's nuclear activities by the signing of an Additional Protocol to Vietnam's Comprehensive Safeguards Agreement with the IAEA; and
- The duration of the 123 Agreement, which after 30 years would be automatically extended for successive five-year periods unless either party, upon six months' notice, elected to terminate the accord.

The Committee must also give attention, I believe, to a number of other matters regarding the context in which the Agreement will be implemented, a context that will be shaped by the nature of the Vietnamese government and its implementation of measures external to the Agreement concerning the control of nuclear materials and equipment.

### **The Agreement: Enrichment and Reprocessing, Additional Protocol, Duration**

U.S. policy, which I have strongly supported for many years, is to discourage the development of foreign enrichment and reprocessing capabilities. Given the desire of many states to sign a nuclear cooperation agreement with the United States, these agreements provide the opportunity to negotiate restrictions on the development of enrichment and reprocessing capabilities in partner countries.

Our 2009 agreement for cooperation in the peaceful uses of nuclear energy with the United Arab Emirates (UAE) contains the ideal undertaking on this issue from the U.S. standpoint. In the agreement the UAE formally guaranteed, without qualification, not to engage in enrichment or reprocessing within its borders, a guarantee that extended not only to U.S.-origin nuclear material (and material produced through its use) but to all nuclear material from any source. The UAE also undertook to bring into force an Additional Protocol to its Comprehensive Safeguards Agreement with the IAEA, a pledge that it fulfilled in 2010. This combination has become known as the Gold Standard for new or renewed U.S. 123 agreements. Even though those two undertakings are not required at this time under Section 123, the UAE agreement so fully encompasses the most powerful international nonproliferation restraints on civil nuclear energy that it has become a paradigm against which all subsequent agreements proposed by the United States or any other nuclear supplier country are inevitably judged. Neither the Obama Administration, nor any other

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<sup>1</sup> This testimony is given in my personal capacity and does not necessarily represent the views of the James Martin Center or its parent institutions. The James Martin Center does not take institutional positions on matters of public policy.

state has made both components of the Gold Standard a mandatory requirement for new or renewed agreements for civil nuclear cooperation, although Japan has conditioned civil nuclear transfers on recipients' implementation of an Additional Protocol.<sup>2</sup>

*Enrichment and reprocessing.* The U.S.-Vietnam 123 Agreement does not contain a comparable blanket restriction on enrichment or reprocessing. It provides, as required by Section 123 that no U.S.-origin material (or material produced through use of U.S. nuclear exports) will be enriched or reprocessed "unless the parties agree," effectively giving the United States the right to veto such activities, but leaves open the door to Vietnam's engaging in enrichment or reprocessing of material of non-U.S. origin.<sup>3</sup> Vietnam has, however, affirmed, in a Memorandum of Understanding (MOU) with the United States of March 30, 2010, that it does not intend to seek enrichment or reprocessing capabilities, but instead will rely on "existing international markets for nuclear fuel services, rather than acquiring sensitive nuclear technologies...."<sup>4</sup> This declaration is reaffirmed in the Preamble to the U.S.-Vietnam 123 Agreement, a portion of the agreement that is descriptive rather than binding.

Unlike the UAE guarantee, the MOU does not contain a clear commitment by Vietnam not to engage in enrichment or reprocessing within its borders, but only expresses Vietnam's current intention to obtain fuel services for its reactors from external sources. Nor does the declaration, include any commitment as to its duration. Thus the MOU falls well short of the "Gold Standard" on this issue.

Nonetheless, when compared to the requirements of Section 123 and to most past U.S. 123 agreements, the Vietnamese declaration is a significant step forward, because it extends beyond restrictions on U.S.-origin material to cover Vietnam's entire fuel cycle, with a presumption of restraint, i.e., that it will not include sensitive facilities. Although it is non-binding, it clearly reflects Vietnam's appreciation that engaging in enrichment or reprocessing would be a politically charged development that would raise national security concerns in many quarters.

Although the details of the U.S.-Vietnam negotiations are not publicly known, my understanding is that the United States pressed to obtain language in the Agreement comparable to that in the UAE accord, but was unable to gain Vietnam's acceptance of this restriction. Thus, although the current Agreement falls short of the Gold Standard, as my James Martin Center colleague Miles Pomper has suggested, the U.S.-Vietnam Agreement nevertheless advances enrichment and reprocessing controls from the previous baseline to an intermediate level, which he has termed, the *Silver Standard*.

Given Vietnam's relatively strong record on nonproliferation as highlighted in the Nuclear Proliferation Assessment Statement accompanying the submission of the Agreement for Congressional consideration and the overall security environment in Southeast Asia, with certain safeguards suggested below, the Silver Standard can provide an adequate basis for endorsing this aspect of the Agreement.

*Additional Protocol.* The second component of the Gold Standard – the requirement that the cooperating state have in force an Additional Protocol to its Comprehensive Safeguards Agreement

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<sup>2</sup> The Japanese condition means that this requirement will apply to any nuclear power reactor sale involving the principal U.S. reactor vendors, since they are now combined with Japanese firms, General Electric with Hitachi and Westinghouse with The Toshiba Group.

<sup>3</sup> U.S.-Vietnam Agreement for Cooperation in the Peaceful Uses of Atomic Energy, Article 6.1.

<sup>4</sup> Nuclear Proliferation Assessment Statement accompanying the submission of the U.S.-Vietnam Agreement in the Peaceful Uses of Nuclear Energy, p. 6.

with the IAEA – is not currently required by U.S. law and, I believe, has not been declared to be a mandatory requirement for U.S. 123 agreements as a matter of U.S. policy. In the current case, the issue is moot, however, because Vietnam has had an Additional Protocol in force since September 17, 2012.

*Automatic five-year extensions.* A troubling aspect of the pending 123 Agreement, however, is its provision for automatic extensions for five- year periods after its initial term of 30 years – the third major issue of concern to the Committee.

Historical practice was for 123 agreements to terminate automatically after 30 years, requiring formal renegotiation and renewal, which brought the agreement before Congress prior to its entry into force and provided the occasion for updating agreements to incorporate changes in U.S. law or policy. Requiring formal *termination* of an agreement that would otherwise be extended automatically in order to create the opportunity for such updating makes what had been a routine process into one that is exceptional and that would give the appearance that something is amiss regarding the partner country's cooperation. This places an undue burden on the United States.

The issue is exacerbated in the case of the Vietnam Agreement because the automatic renewal arrangement must be considered in conjunction with Vietnam's declining to provide a blanket renunciation of enrichment and reprocessing and, instead, affirming only its "intention" not to develop such sensitive fuel cycle facilities. Should its intention change in the course of 30 years, the United States would be forced to threaten termination of the 123 Agreement to gain leverage on the matter. Without the automatic renewal provision, however, the burden would be on Vietnam to satisfy any U.S. concerns in order to obtain the continuation of the agreement.

It is possible for Congress to address this matter in a number of ways. It could, for example, adopt an internal housekeeping rule that required a hearing 12-15 months prior to the end of the Agreement's initial 30-year term at which time the Executive Branch could be required to show why the Agreement should not be terminated to allow, for example, the inclusion of certain amendments to its provisions at the time of the subsequent renewal. If Congress believed termination and renewal were required, it could press the Executive Branch to take this step or enact legislation requiring it, possibly via a joint resolution adopted through expedited procedures. Another approach would be to deny the Nuclear Regulatory Commission the authority to issue licenses under any agreement that was more than 30 years old, except as authorized by a joint resolution of Congress, which might provide licensing authority on a country-by-country basis for a period judged appropriate at that time.

Given the long lead times for the construction of nuclear power plants and the likelihood that such facilities will operate for 30 to 50 years, one can understand why reactor vendors and operators wish to have confidence that the legal basis for the continued cooperation needed to operate these facilities will not be interrupted by the delay of an agreement renewal. But I believe if one of the measures I have suggested were adopted, we could provide such confidence through informal means without sacrificing a robust review process.

### **Regulatory Context**

As noted in the Nuclear Proliferation Assessment Statement accompanying the Vietnam 123 Agreement, Vietnam has reasonably strong nonproliferation credentials.

*Lack of strategic trade controls.* Among other positive steps, it has enacted export controls over nuclear-specific goods as part of its Nuclear Energy Law of 2008. It has not, however, adopted a

strategic trade control law, calling into question whether it has the legal authority to control dual-use nuclear goods, currently a primary target of illicit procurement efforts by Iran and North Korea.

Although one does *not* see Vietnam linked to such illicit procurement efforts in media reports, the absence of strategic trade controls means that Vietnam may be unable to comply with the requirements of UN Security Council resolutions that impose embargoes on transfers of nuclear dual-use goods, among other commodities, to both countries.

*Compliance with UNSC Resolution 1540.* Lack of a strategic trade control law also means that Vietnam is not in compliance with UNSCR 1540, which requires states to adopt such measures. In this regard, it should also be noted that Vietnam does not release data on its compliance with UNSCR 1540. It is one of only a handful of countries whose 1540 implementation matrix is not shown on the 1540 Committee's website and available for public scrutiny.

*Regulatory independence.* Separately, it may be appropriate to question the extent to which the country's nuclear regulatory authority will have the independence or inclination to enforce safety and security standards effectively. Among lower middle income states rated by the World Justice Report, Vietnam ranks 20 out of 24 in "Regulatory Enforcement" and 20 out of 24 in "Constraints on Government Power," a reflection, no doubt, of its form of government, a one-party Communist dictatorship.<sup>5</sup>

These various regulatory issues need to be monitored and can be addressed via the U.S. nuclear export licensing process. Although improvement in these areas is not a requirement of the licensing process as set out in the Atomic Energy Act or the Export Administration Regulations, the Committee should press the Administration to ensure that progress is made before the Executive Branch provides guidance to the NRC supporting issuance of any future license for the export of nuclear reactors, major components, or fuel to Vietnam and before the Departments of Commerce and Energy authorize transfers of nuclear dual-use goods or nuclear technology, respectively, to that country.

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<sup>5</sup> Vietnam also ranked 13 of 15 countries in its region on these measures. See "Rankings by Income," and "Rankings by Region," World Justice Project website, [http://worldjusticeproject.org/sites/default/files/files/tables\\_methodology.pdf](http://worldjusticeproject.org/sites/default/files/files/tables_methodology.pdf)