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Agreement for Cooperation Between the Government of the United Arab Emirates and the Government of the United States of America Concerning Peaceful Uses of Nuclear Energy

Statement before the Senate Foreign Relations Committee, Subcommittee on Near Eastern and South and Central Asian Affairs

Harold McFarlane

International Nuclear Energy Academy, Chairman

American Nuclear Society, past President (2006-2007)

Idaho National Laboratory, Deputy Associate Laboratory Director for Nuclear Science and Technology

Chairman Casey, Ranking Member Risch and Members of the Subcommittee:

Thank you for this opportunity to testify today before the Senate Foreign Relations Committee, Subcommittee on Near Eastern and South and Central Asian Affairs, on the U.S.-UAE Agreement for Peaceful Nuclear Cooperation. I believe that this agreement will set a positive example for the more than 30 countries that for the first time are considering nuclear energy as a strategic component for meeting their projected growing demand for reliable, clean baseload electricity. It will also establish expectations of strong nonproliferation assurance for other nations with nuclear energy ambitions in the region. Given the ongoing challenges the international community has faced with Iran, the UAE's voluntary agreement to forgo the sensitive technologies of uranium enrichment and reprocessing while applying IAEA safeguards to all nuclear activities will usher in a landmark standard of nonproliferation and safety transparency in the Middle East and other parts of the world.

The UAE has expressed a willingness to make the investment in capital, time and human resources that is necessary to implement a responsible nuclear energy program. The UAE has already contributed \$10 million towards an international fuel bank that will help create a low-enriched uranium reserve as insurance against supply disruptions in the global uranium market. Preparation for irreplaceable U.S. cooperation and advice in developing a robust regulatory safety framework has begun with initial discussions about arrangements for technical exchanges. For 60 years aspiring and established nuclear energy states have turned to the U.S. education system to train their future leaders in nuclear research, regulation, and commercialization. This is a critical role that the U.S. can serve in nurturing the UAE's development of an educational framework for the nuclear workforce that it will need to create and sustain a safe and reliable nuclear energy infrastructure.

Among the countries with existing peaceful nuclear energy programs, I have found a consistently high level of desire for U.S. engagement and leadership in international nuclear matters, an interest that has

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been sustained through periods when U.S. nuclear energy policy was less defined. The cooperation agreement with the UAE sends a strong signal that the U.S. is engaging with clear policy objectives for nonproliferation, safety and responsible international expansion of the benefits of clean nuclear energy. This action will have positive impacts beyond this specific agreement. Failure to act would be detrimental to U.S. nonproliferation and economic objectives.

It has been estimated that the UAE will spend some \$40 billion over the next few decades to create and operate their nuclear energy supply system. Under the umbrella of the 123 Agreement, U.S. industry will be able to compete for some of that business, with a high expectation of success. Although some U.S. firms are currently providing evaluation and advisory services to the UAE, without a nuclear cooperation agreement in place, the large supplier contracts will depend upon this agreement. Given this agreement's unprecedented affirmation of U.S. policy objectives and its apparently broad support from all branches of government, the resulting creation of thousands of high-quality U.S. jobs will be a well-earned outcome.

The Department of Energy's national laboratories provide an unparalleled technical resource than can be called upon to help assure that terms of this agreement are effectively implemented and monitored. The national labs work closely with the International Atomic Energy Agency (IAEA) to develop and implement effective compliance monitoring technology. For example, Los Alamos took the lead role in designing and testing equipment for assuring safeguards compliance in the soon-to-be-commissioned Rokkasho Mura reprocessing plant in Japan. Oak Ridge has helped return highly enriched uranium from areas of the world when it no longer had a viable use. Argonne and Idaho have developed low-enriched research reactor fuel to convert both foreign and domestic research reactors from high-enriched uranium without noticeable loss of capability.

National laboratory and Department of Energy personnel also work with the IAEA to develop resource information on the complex institutional and technical framework needed by nations with emerging peaceful nuclear energy ambitions. National laboratories also work together with their industry, academia, and regulatory counterparts on harmonizing international nuclear safety standards with the IAEA and other international organizations such as the Organization for Economic Cooperation and Development/Nuclear Energy Agency and the Generation-IV International Forum.

National laboratories, universities, and the nuclear industry have a large cadre of nuclear personnel who actively participate in international professional organizations. This type of unofficial engagement

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provides additional insight into the ambitions of other countries while projecting our safety and nonproliferation values in an effective and positive venue. Last year a UAE representative, with a nuclear engineering degree from Purdue University, explained the UAE's approach to developing nuclear energy to a meeting of the American Nuclear Society. In a healthy, compliant nuclear program we would expect to see this type of engagement by the UAE increase and be expanded to include active participation in other relevant organizations such as WANO, the World Organization of Nuclear Operators.

In summary, my 37 years in national and international nuclear energy arenas leads me to support the Agreement for Cooperation between the Government of the United Arab Emirates and the Government of the United States of America Concerning Peaceful Uses of Nuclear Energy. My international experience has convinced me that U.S. engagement and leadership are effective tools for positively influencing nuclear programs abroad. In the case of the UAE, our assurance of an international nuclear fuel supply in exchange for their renunciation of sensitive nuclear technologies reinforces that conviction.

This concludes my prepared statement and I would be happy to take any questions you may have.