

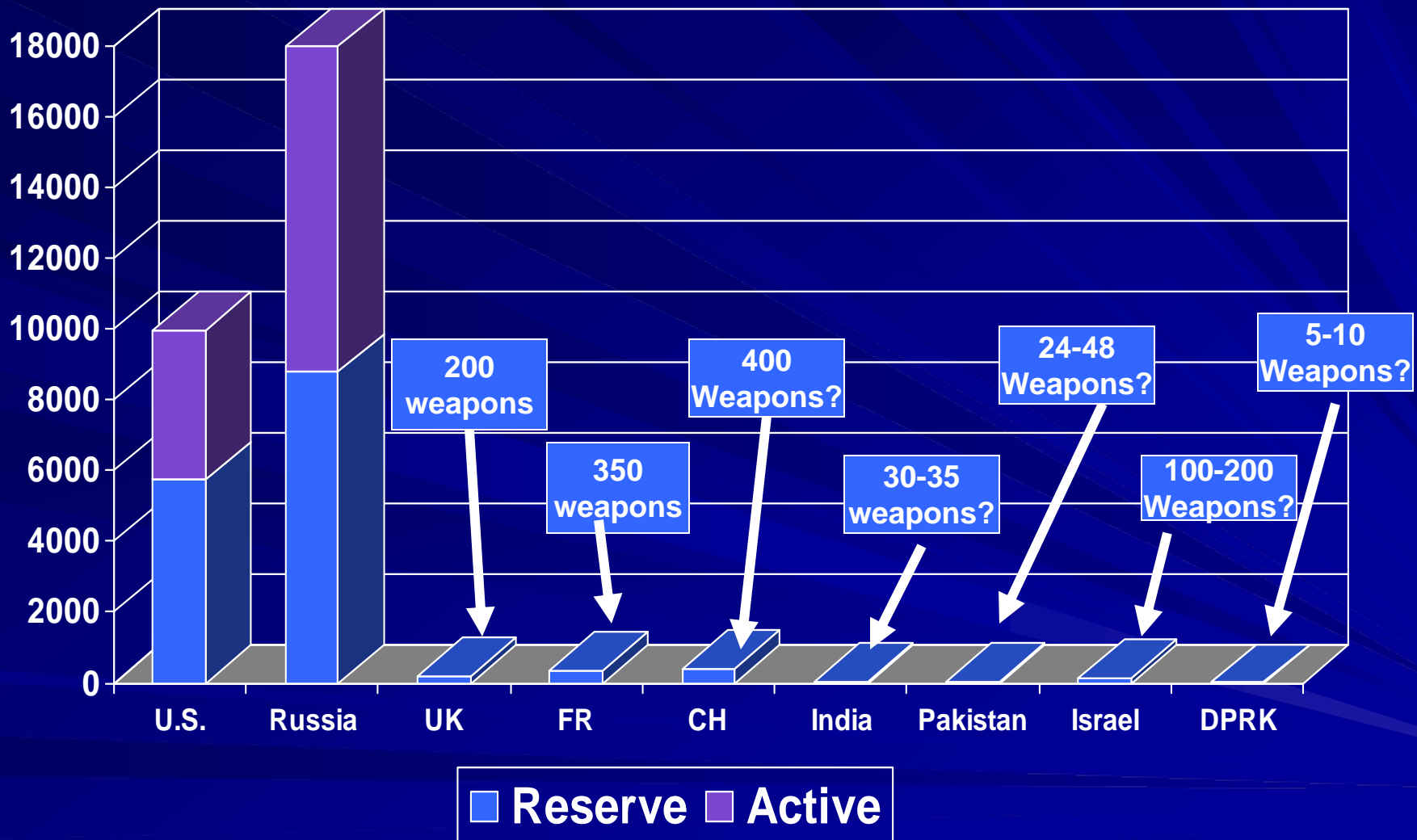
The Unfinished Business of Nuclear Disarmament

Robert Alvarez
Senior Scholar,
Institute for Policy Studies
Washington, D.C.
April 3, 2008

“ Nuclear weapons today present tremendous dangers, but also an historic opportunity. U.S. leadership will be required to take the world to the next stage -- to a solid consensus for reversing reliance on nuclear weapons globally as a vital contribution to preventing their proliferation into potentially dangerous hands, and ultimately ending them as a threat to the world.”

George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn.
Wall Street Journal, April 4, 2007

The Legacy of the nuclear arms race remains a danger to the world.



The Bush administration and the nuclear “preemption doctrine”

- On September 14, 2002 President Bush issues a directive (NSPD-17), which names Syria, Lybia, Iran and North Korea as potential nuclear targets.
- In December 2005, Members of Congress including the Chairman of the House Armed Services Committee write to President Bush to denounce “a drastic shift in U.S. nuclear weapons policy.”
- Preemptive nuclear attacks against nations that may pose *imminent* threats of possessing weapons of mass destruction are authorized in 2005.
- In 2006, this doctrine is reaffirmed in the President’s “National Security Strategy.”

Strategic Offensive Reductions Agreement (SORT)

- The SORT Treaty approved in 2002 sets lower warhead limits than START I and requires both sides to reduce their deployed strategic nuclear warheads to between 1,700 and 2,200 warheads by December 31, 2012.
- The SORT Treaty is tenuous and has only one deadline --when the agreement expires. It does not set out benchmarks, or timetables, for reductions. It has no verification provisions and both parties can withdraw at any time.
- On December 18, 2007, President Bush announced that he had approved a 50 percent reduction in the U.S. nuclear arsenal by the end of 2007. Warheads were removed from deployment and shifted to DOE, where there are no plans expressed for their dismantlement.

The Strategic Arms Reductions Treaty (START I)

- **The only verifiable strategic arms treaty still in force between the U.S. and the Russian Federation is the Strategic Arms Reduction Treaty (START I). The treaty will expire in December 2009.**
- **The next Administration will have to decide relatively quickly if it will seek another agreement of this kind. With the departure of the Bush administration this will become an important benchmark.**

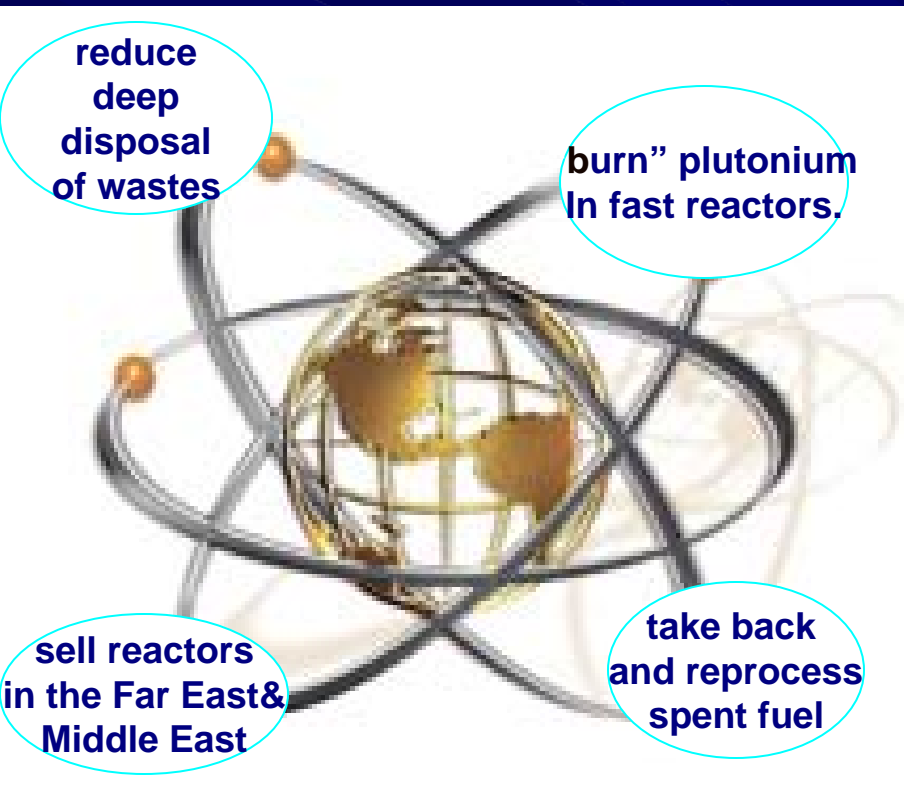
Current Situation in the U.S. Congress

- Major elements of the Bush administration Nuclear Posture Review have been rejected by the U.S. Congress. (i.e. design and production of new nuclear weapons).
- The U.S. Congress has set in place two separate U.S. nuclear weapons posture reviews due by early next year (one by an expert panel and one by the DOD).
- Interest is growing among House Armed Services Committee leaders for deeper cuts in the nuclear arsenal (500active/500 reserve).
- Congress is unlikely to enact the FY 2009 appropriations for the DOE nuclear weapons program – leaving that decision to the next Congress and a new Administration in February of next year.

Non-Proliferation

- **The nuclear Non-Proliferation Treaty review Conference will commence in 2010.**
- **Major opportunities and pressures will arise for the nuclear weapons states to significantly reduce their nuclear arsenals.**
- **“20 or 30 States...have the capacity to develop nuclear weapons in a very short span of time.”** Director General Dr. Mohamed El Baradei, International Atomic Energy Agency, October 16, 2006

The Global Nuclear Energy Partnership (GNEP)



Last year Congress halted funding to build reprocessing and fast reactor facilities under GNEP and will only permit DOE to carry out research and development.

Also, the National Academy of Sciences advised DOE last year to scale back its efforts to deploy unproven technologies under GNEP.

Between FY 2002 and FY 2008 DOE will spend about \$750 million on GNEP technologies. Yet it has yet to provide necessary information such as proliferation risks, long term costs, and a radioactive waste plan for GNEP.

GNEP and Proliferation

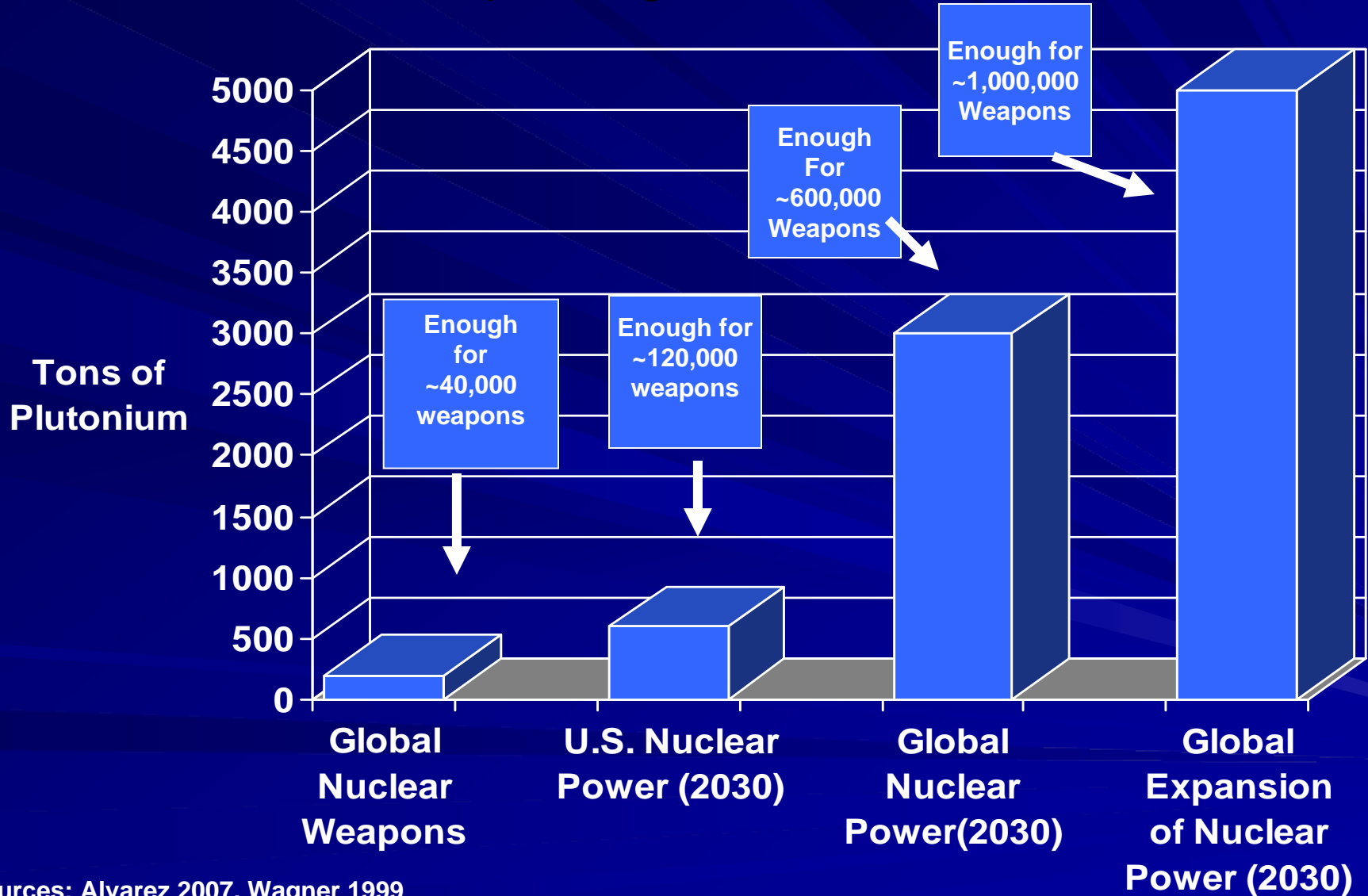


In FY 2009 DOE requests \$301.5 million (a 60% increase) for development of spent nuclear fuel reprocessing and “fast” reactors to convert weapons materials.

For the last 30 years the U.S. has refrained from reprocessing civilian reactor spent fuel because it makes nuclear explosive materials available for nuclear weapons production.

The Energy department is providing several millions of dollars for cooperative programs with nations such as Russia and South Korea to separate nuclear explosive materials from civilian reactor spent fuel.

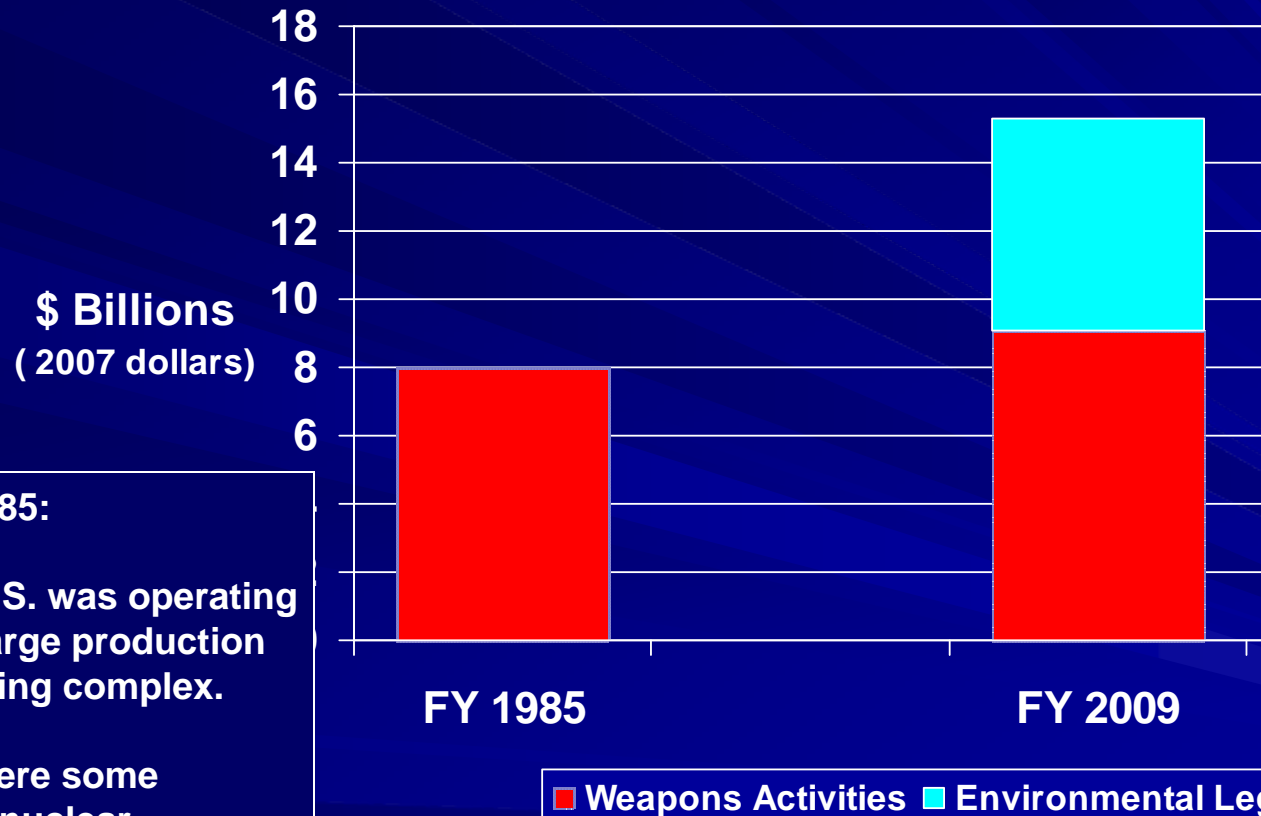
In response to the threat of global warming, the flows and stockpiles of potential nuclear bomb making materials from nuclear power growth could increase.



The costs of nuclear weapons continue to grow.

- Estimated spending on all U.S. nuclear weapons and weapons-related programs in FY 2008 : \$45,500,000,000.
- Estimated cost for stabilization and disposal of nuclear weapons wastes and environmental cleanup of U.S. weapons sites: \$260 to \$500 billion (1990-2070).
- Since 1990, \$3.4 billion has been paid out to 35,600 Americans for radiation injury and death due to weapons activities.
- National Cancer Institute estimates that some 75,000 Americans may contract cancer as a result of atmospheric weapons tests in Nevada.
- Total spent by U.S. on nuclear weapons since 1941: \$5.4 trillion (2008 dollars).

Energy Department costs for a nuclear warhead keep going up.



In FY 1985:

- The U.S. was operating a very large production and testing complex.

There were some 20,000 nuclear weapons.

- The cost per warhead was ~ \$360 thousand/yr.

In FY 2009:

- The U.S. weapons production complex has shrunk by 70%, and no new nuclear weapons are being made.

- There are ~ 10,000 nuclear weapons (deployed/reserve)

- The per warhead cost, including cleanup costs and maintaining retired weapons, is now ~ \$1.5 million/yr-- a 400+% increase.*

* Does not include DOD costs (in the \$Billions)

The Hidden Legacy

- **The end of the Cold War has created a legacy in the U.S. of thousands nuclear warheads no longer needed, and tens of tons of nuclear materials stored under dubious circumstances.**
- **Both the U.S. and Russian nuclear weapons programs have aged and deteriorated facilities, which lack adequate capabilities for the safe and secure storage of nuclear materials (spent reactor fuel, plutonium, highly-enriched uranium, Uranium-233, Neptunium-237)**

The United States government can take several initiatives to fulfill its commitment to Article IV of the NPT.

- **Establishing a START II Agreement with Russia,**
- **Ratification of the Comprehensive test Ban Treaty**
- **Establishing a fissile material cut-off,**
- **Dramatically reducing the size of the U.S. nuclear arsenal, and**
- **Subjecting fissile materials resulting arms cuts to IAEA inspections.**

Article VI of the Nuclear Non-Proliferation Treaty

- “Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control.”

Establishing a stronger U.S. Government Programmatic Mission Dedicated to Nuclear Disarmament and Non-Proliferation

Major Issues:

- Nuclear weapons policies and doctrines should be thoroughly reviewed in the context of the NPT.
- Cooperative Threat Reduction Program in DOD should be expanded.
- State Department – Re-establish Arms Control and Disarmament Agency ?
- DOD --Restructuring STRATCOM and DTRA to meet major arms reduction goals.
- Shifting the DOE's National Nuclear Security Agency to the Defense Department.

What needs to be done at DOE?

- Efforts to promote production of new weapons should cease.
- Maintaining a smaller nuclear arsenal and nuclear material stewardship should become the primary policy “drivers.”
- Establishing a modern infrastructure to dismantle nuclear weapons and to ensure safe, secure storage and disposition of fissile materials.
- The U.S. needs only one nuclear weapons laboratory.
- Down blending greater amounts of excess highly enriched uranium.

Conclusion

- **The next presidential administration and U.S. Congress will enter an important historic moment in the nuclear age.**
- **Both Republican and Democratic Congresses have consistently rejected proposals to design and build new nuclear weapons.**
- **The expiration of the START I Treaty in 2009 will become an important benchmark for the future of nuclear arms reductions.**
- **The Nuclear Non-Proliferation Treaty Review Conference in 2010 provides an important opportunity for the United States to take bold steps in reducing nuclear arms.**
- **Restructuring the U.S. government's programs will be required to meet NPT policy goals.**