



Testimony for the Record

**Submitted by
Scott L. Campbell
President, American Council on Global Nuclear Competitiveness**

**to the
U.S. Senate
Committee on Appropriations
Subcommittee on Energy and Water Development**

Global Nuclear Energy Partnership Hearing

September 14, 2006

Thank you for the opportunity to submit this testimony for the record. We believe the subject of today's hearing, the Global Nuclear Energy Partnership (GNEP), is a proposal of potentially historic importance. We applaud the Subcommittee for calling today's hearing to explore the Department of Energy's (DOE's) progress in formulating its GNEP strategy.

Through GNEP, the U.S. is attempting to reclaim its position of leadership in nuclear energy. The Administration's proposal will address the two main challenges associated with a widespread expansion in the use of nuclear power: the need to keep nuclear technologies and materials out of the hands of rogue states and terrorists, and the need to minimize the generation of nuclear waste.

The President envisions a future where nations with established nuclear energy capabilities provide assured nuclear fuel supply and return services to nations who agree to forego nuclear fuel enrichment and reprocessing, the technologies that give rise to genuine nuclear proliferation concerns. Such a future would include far greater use of advanced nuclear reactors based on the types that are already being used to produce twenty percent of our electricity. For countries with smaller electricity needs, we would provide safe, proliferation-resistant nuclear reactors that can be used to supply electricity or meet other energy-intensive needs such as drinking water purification. Finally, the President's vision includes the recycling of used nuclear fuel, which will drastically reduce the accumulation of nuclear waste and can increase the amount of energy extracted from the fuel by a factor of nearly one hundred.

The plan offers great benefits for the U.S. and the world. By leading in the development of advanced reactors and recycling technologies, the U.S. can reclaim its role as the major global nuclear energy supplier and can exert greater influence over the directions

other countries take with their nuclear power programs. These advanced technologies can be translated into billions of dollars in revenue and tens of thousands of high-paying jobs for U.S. designers, manufacturers, and suppliers. And the use of advanced reactors across the globe can go a long way toward reducing greenhouse gas emissions while providing the energy needed to pull entire nations out of poverty and thus address one of the root causes of terrorism. All told, the Administration's plan is a bold step in the right direction.

As the Administration moves forward with its GNEP planning, the Council believes there are certain guiding principles that DOE should follow.

- First and foremost, it is essential that GNEP include from the start strong participation by industry, and especially U.S. industry. It will ultimately fall to industry to construct and operate the fuel recycle, fuel fabrication, and reactor facilities needed to realize the GNEP vision. But while the construction and operation of these facilities is important, we must not miss the opportunity GNEP presents to restore the competitive position of the U.S. nuclear industry. U.S. capabilities in the nuclear energy area are of strategic importance, not only in meeting our future energy needs, but also in achieving important non-proliferation and national security objectives. For example, U.S. initiatives for nuclear weapons disposition, proliferation detection and prevention, international reactor safety, and many others have been heavily dependent on the availability of strong nuclear capabilities here at home. So U.S. industry should be given a preferred position commensurate with its strategic importance. Early involvement of industry, and particularly of U.S. industry, will help ensure that the technologies being commercialized by industry can best meet U.S. goals for GNEP.
- Second, DOE's plans must maintain a strong commitment to further research and development of advanced recycling and fuel fabrication technologies. It is important to maintain a robust R&D effort, an effort that could lead to even better technologies becoming available for commercial use in the near future. By further advancing the state of the technology and placing these advanced technologies in the hands of U.S. industry, we can achieve the type of "technology leap" that will help restore U.S. firms to a position of leadership in global nuclear energy markets.
- Finally, DOE must ensure that its research effort going forward includes closer cooperation with industry than has been the case thus far. Our National Laboratories should be encouraged, even required, to work with U.S. industrial firms to ensure the technologies being developed can be brought to market, and to provide U.S. firms the opportunity to benefit first and most from technologies being developed at the taxpayers' expense.

The American Council on Global Nuclear Competitiveness was formed to alert policymakers and the public of the need to restore U.S. leadership in nuclear energy. The President took a bold step toward restoring this leadership with the announcement of GNEP. We support the President's vision for GNEP, which if properly implemented

and accompanied by an American-led, transforming technology leap, could restore America's preeminence in the nuclear enterprise. If GNEP is structured with an eye toward enhancing U.S. economic competitiveness, American industry could thrive.

The Council has been concerned, however, about our industry's ability at present to participate fully in GNEP. So the Council is recruiting leadership from the business world – as well as from U.S. national laboratories and universities – to respond to the enormous opportunities that a resumption of U.S. nuclear energy leadership could create. U.S. manufacturing, technology, financial, and other interests should seize the opportunity and rally to ensure that the President's vision is realized. And indeed, we are finding an encouraging number of U.S. companies interested in getting into the nuclear business or growing their nuclear portfolios. By restoring a robust nuclear industry, America can protect its environmental, economic, and national security interests and it can also reclaim leadership of the global nuclear energy industry, an industry created through American ingenuity more than fifty years ago.