October 31, 2007

The Hon. Byron L. Dorgan, Chair
Subcommittee on Energy and Water Development
186 Dirksen Senate Office Building
Washington, DC 20510-6030

The Hon. Pete V. Domenici, Ranking Member
Subcommittee on Energy and Water Development
188 Dirksen Senate Office Building
Washington, DC 20510-6030

Dear Senators,

We write to oppose the Department of Energy's (DOE) Global Nuclear Energy Partnership (GNEP) plan for reprocessing spent nuclear fuel because it undermines U.S. nonproliferation policy, would cost taxpayers $100 billion or more, and, as many in the nuclear industry point out, does not solve the nuclear waste problem. The Senate Appropriations Committee Fiscal Year 2008 Energy and Water Appropriations bill provides $243 million for GNEP, while the House approved $120 million in its version of the bill. We urge you to eliminate funding for the program.

Although GNEP has never been authorized by Congress, DOE is seeking funding to dramatically increase reprocessing research and development activities and build full-scale facilities in the United States, while energetically promoting GNEP abroad. Shifting from its earlier proposals for small-scale projects, DOE now plans to build a full-scale reprocessing plant, a commercial-sized fast reactor, and a fuel cycle “research” facility (which itself will have significant reprocessing capacity), before any of the necessary technologies have been demonstrated outside the laboratory. These efforts are ill-advised and premature, as there is no evidence that GNEP will be able to fulfill the highly optimistic goals claimed by its promoters.

Although DOE is promoting GNEP internationally on nonproliferation grounds as a way to slow the spread of technologies used to produce fissile material for nuclear weapons, the program has had the opposite effect. Since GNEP’s inception, eight countries have notified the International Atomic Energy Agency that they reserve the right to pursue enrichment and reprocessing technologies, including South Africa and Argentina, which are considering reviving their enrichment programs. The DOE’s tacit endorsement of these plans, together with its pursuit of reprocessing and fast reactor technology agreements with several other nations, undermines President Bush’s 2004 non-proliferation policy. For instance, the DOE is cooperating with South Korea on reprocessing technology, and President Bush extended invitations to Australia and Canada to join GNEP as “fuel cycle” states with no constraints on their domestic enrichment and reprocessing facilities.

Moreover, DOE’s goal of “no more separated plutonium” (the key ingredient in modern nuclear weapons) has also been set aside. DOE has allowed France and Japan to become key partners in GNEP even though both countries will continue to produce annually many tons of separated plutonium — the equivalent of thousands of bombs — for decades to come. And DOE’s current preferred technology for U.S. reprocessing plants would separate a mixture of uranium, plutonium and neptunium, which would not be significantly more difficult for terrorists to steal and process than pure plutonium. Proposed enrichment or reprocessing programs in other countries create similar dangers. Clearly, GNEP is fostering the spread of reprocessing technologies and dangerous nuclear weapons-usable materials, undermining U.S. nonproliferation goals.
The cost of GNEP to U.S. taxpayers is likely to be prohibitive. Data from a recent study by Idaho National Laboratory for DOE indicate that pursuing a GNEP reprocessing program involving a mix of light-water and fast reactors would cost over $1 billion per year more than the current once-through system using light-water reactors.¹ The estimates do not include the “life-cycle” costs of building or operating the reactors, which would drive up GNEP expenses, perhaps by additional billions per year.

Reprocessing produces huge volumes of liquid high-level nuclear wastes; as a result, contaminated sites at Hanford, WA, Savannah River Site, SC, and West Valley, NY have required massive clean-up efforts that have, and continue to, cost billions of dollars. It is astonishing how DOE could propose a vast new reprocessing program when it has failed to effectively deal with the legacy wastes from prior reprocessing activities.

Finally, many in the U.S. nuclear industry do not consider GNEP a viable solution. A June 2007 report coauthored by, among others, representatives from the Nuclear Energy Institute and nuclear utilities such as Exelon, Entergy, Southern Nuclear, GE Energy-Nuclear, Duke Energy, and FPL, concluded that GNEP “is not a strategy for resolving either the radioactive waste problem or the weapons proliferation problem” and that “critical elements of the GNEP are unlikely to succeed.”²

Among the shortfalls outlined in the report were problems with GNEP’s cost-effectiveness, technological viability, and capacity to eliminate waste streams. Contrary to GNEP proponents’ claims that reprocessing would reduce the burden on a geologic repository, the report notes that the current practice of reprocessing “does not significantly reduce capacity requirements at Yucca Mountain,” and that “the volume of low-, and intermediate level wastes substantially increases with reprocessing.” Moreover, the report states that “the program as currently envisioned could actually further proliferation risks.”

Given the proliferation risks, the high monetary costs of reprocessing, and the lack of industry support, we urge Congress to zero out funding for GNEP.

Sincerely,

National Organizations

Alfred Meyer       Daryl Kimball
Program Director      Executive Director
Alliance for Nuclear Accountability      Arms Control Association

¹ The study by Idaho National Laboratory for DOE, David Shropshire et al, “Advanced Fuel Cycle Economic Sensitivity Analysis,” INL/EXT-06-11947, December 2006, estimated that a GNEP-type system with reprocessing and a mix of 73% light-water reactors and 27% fast burner reactors would have fuel cycle costs, on average, about 0.015 cents per kilowatt-hour more expensive than the current system based on a once-through system with light-water reactors. For a nuclear energy system around 100 GWe, this would correspond to a cost penalty of over $1 billion per year associated with the GNEP system. These estimates does not include reactor capital and operating costs, and thus do not reflect the cost penalties associated with considerably higher costs of fast reactors compared to thermal reactors.
Svend Soeyland  
Director  
Bellona USA

Kevin Kamps  
Radioactive Waste Watchdog  
Beyond Nuclear

Amb. Robert Grey (Ret.)  
Director  
Bi-Partisan Security Group

John Isaacs  
Executive Director  
Council for a Livable World

Ivan Oelrich  
Vice President  
Strategic Security Program  
Federation of American Scientists

Jim Riccio  
Nuclear Policy Analyst  
Greenpeace

Robert Alvarez  
Director  
Nuclear Policy Project  
Institute for Policy Studies

Christopher Paine  
Nuclear Program Director  
Natural Resources Defense Council

Nick Roth  
Director  
Nuclear Age Peace Foundation  
Washington D.C.

Michael Mariotte  
Executive Director  
Nuclear Information and Resource Services

Will Calloway  
Legislative Director  
Physicians for Social Responsibility

Frank von Hippel  
Professor of Public and International Affairs  
Princeton University

Tyson Slocum  
Director  
Public Citizen

Edwin Lyman  
Senior Staff Scientist  
Union of Concerned Scientists

Susan Shaer  
Executive Director  
Women’s Action for New Direction

Regional/State/Local Organizations

Jennifer O. Viereck  
Director  
Healing Ourselves & Mother Earth (HOME), CA & NV

Deb Katz  
Executive Director  
Citizens’ Awareness Network, CT, MA, NH, NY, & VT

Glenn Carroll  
Coordinator  
Nuclear Watch South, GA & SC

Molly Johnson  
Area Coordinator  
San Luis Obispo County Grandmothers for Peace, CA

Ann P. Harris  
Nuclear Task Force  
Sierra Club, CA

Marylia Kelley  
Executive Director  
Tri-Valley CAREs, CA

Bob Kinsey  
Co-Chairperson  
Colorado Coalition, CO

Adrienne Anderson  
Coordinator  
Nuclear Nexus: Working to End Local Hazards and Global Threats  
Rocky Mountain Peace and Justice Center, CO
Bob Darby  
Coordinator  
Atlanta Food Not Bombs, GA

Tom Ferguson  
Coordinator  
Atlanta Foundation for Global Community, GA

Bobbie Paul  
Director  
Atlanta Women’s Action for New Directions, GA

Yomi Noibi  
Executive Director  
Environmental Community Action, Inc. (ECO-Action), GA

Beatrice Brailsford  
Program Director  
Snake River Alliance, ID

David A. Kraft  
Director  
Nuclear Energy Information Service, IL

Mary Davis  
Director  
Yggdrasil Institute (Earth Island), KY

Jim Warren  
Executive Director  
North Carolina Waste Awareness & Reduction Network, NC

Lewis E. Patrie  
Chair  
Western North Carolina Physicians for Social Responsibility, NC

Don Hancock  
Nuclear Waste Program Director  
Southwest Research and Information Center, NM

Jay Coghlan  
Executive Director  
Nuclear Watch New Mexico, NM

Judy Treichel  
Executive Director  
Nevada Nuclear Waste Task Force, NV

Alice Slater  
Director  
Nuclear Age Peace Foundation, NY

Vina Colley  
Portsmouth/Piketon Residents for Environmental Safety and Security, OH

Patricia Marida  
Nuclear Issues Committee Chair, Sierra Club, OH

Lorry Swain  
Board Member  
Southern Ohio Neighbors Group, OH

Judith H. Johnsrud  
Director  
Environmental Coalition on Nuclear Power, PA

Susan Corbett  
Conservation Chair  
South Carolina Chapter Sierra Club, SC

Gregg Jocoy  
Chair  
York County Greens, SC

Eileen McCabe  
Delegate  
Desert Greens, Green Party of UT

Vanessa Greens  
Executive Director  
Heal Utah, UT

Gerald Pollet  
Executive Director  
Heart of America Northwest, WA

John LaForge  
Co-Director  
Nukewatch, WI

cc: Senate Appropriations Committee Members