Why GNEP can't jump to the future

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Congress is now considering whether to approve or zero out the $405 million that President Bush is proposing to spend in fiscal year 2008 on the Global Nuclear Energy Partnership (GNEP)—a program aimed at rendering plutonium inert in nuclear weapons but still useful in nuclear power plants.

Nuclear experts at the National Academy of Sciences have long questioned the practicability of the technologies GNEP plans to employ. Currently, the Government Accounting Office is now reviewing the program. This, however, leaves legislators with an information gap as they struggle to decide whether to fully fund the plan, eliminate it altogether, or redirect some of its funding to the many successful energy programs whose budgets President Bush is proposing to gut in FY 2008. In particular, major questions have been raised about the magnitude and costs of radioactive wastes stemming from the GNEP program.

To help legislators and the American public bridge this information gap, the Institute for Policy Studies will release a rigorous study of GNEP on April 23rd. Directed by Robert Alvarez, Senior Policy Advisor to the U.S. Secretary of Energy from 1993 to 1999, the report concludes that the program is likely to squander billions in taxpayer dollars on an unproven reprocessing technology that will generate unprecedented and unmanageable amounts of highly radioactive wastes without plausible disposition paths.

The potentially deadly flaws documented in Alvarez's study include:

-- The amount of long-lived radioactivity disposed of into the environment at a reprocessing site could be thousands of times greater than from nuclear weapons production. Much smaller concentrations of similar wastes at the DOE's Savannah River Site have been characterized by the National Academy of Sciences as representing "a long term safety concern."

-- GNEP would allow large quantities of cesium 135—a radionuclide with a half life of 2.3 million years—to be disposed in the near surface and pose serious contamination problems for many thousands of years.

-- More than four thousand shipments of spent nuclear reactor fuel will be transported on rails and highways through cities and farmlands to the reprocessing site, posing unprecedented emergency response and security challenges.

-- Despite DOE's claims that recycling of reactor spent fuel will solve the nuclear waste disposal problem, a small fraction is likely to be recycled. Uranium constitutes more than 95 percent of the materials in spent nuclear fuel by weight. But, it will require costly treatment for reuse in reactors – estimated in the billions of dollars. As a result, DOE's plans include the landfill disposal of tens of thousands of tons of recovered uranium.

Alvarez's study concludes that the Energy Department "lacks a credible plan for management and disposal of radioactive wastes stemming from the GNEP program, particularly regarding waste volumes, site specific impacts, regulatory requirements and life-cycle costs."

Or as Alvarez has put it more bluntly in conversation, "You can't just park some of the most highly radioactive wastes in the world at a landfill and assume that by so doing you have kept them safely removed from humans for the next 2.3 million years."

Source: Institute for Policy Studies