

Editorial

The U.S. must go nuclear

Despite some signs that the new U.S. administration is not, in fact, as green as might have been feared, the budget proposals include the extremely stupid decision to cut out all research on advanced nuclear reactors. This is to foreclose the possibility of any real economic recovery, because any uptick in industrial production will quickly reveal the precarious status of the U.S. energy grid. It also rules out a promising immediate area for clean and *safe* energy.

In place of nuclear energy, the Department of Energy plans to go with natural gas and energy-efficiency, which they say is the "public will." In other words, the DOE is giving complete credibility to the loud-mouthed environmentalist lobby. According to one DOE spokesman, the administration plans to use existing nuclear plants, but will not move to build any new ones, nor develop next-generation designs. This kind of thinking is turning what was once the world's leading economy into a technological backwater.

Among the nuclear technologies to be axed is the Integral Fast Reactor, a project at Argonne National Laboratory that is demonstrating how to eliminate nuclear waste by burning it as fuel. The IFR, which just began to burn high-level waste (actinides) in a three-year test, will have to shut down unless its funding is restored by Congress. The Japanese had pledged \$46 million to the research project, but this is not enough to keep it going. Also cut from the budget is the development of a modular high-temperature gas-cooled reactor, the space nuclear program, and other advanced reactor designs.

The DOE restructuring was announced in a six-page press release that is full of mumbo-jumbo green-speak. "We have an opportunity unsurpassed in American history to re-direct our nation's priorities and resources away from the policies of the past and toward building a vibrant economy capable of improving the living standards of the American people," Energy Secretary Hazel O'Leary stated.

Ironically, almost simultaneously—as part of the Clinton-Yeltsin summit—a joint Russian-American project was announced whose goal was the develop-

ment of a new nuclear reactor based on the modular high-temperature gas-cooled reactor. As announced on April 6 by the Russian Federation Ministry for Atomic Energy and General Atomics of San Diego, the new power-generating system, known as the Direct Cycle Gas Turbine Modular Helium Reactor, or GT-MHR, combines an advanced, helium-cooled nuclear reactor with a gas turbine power plant. This direct cycle gas turbine improves the 33% efficiency of conventional steam-turbine generation to 50% efficiency.

A memorandum of understanding signed in Russia on April 1 calls for setting up a joint venture company to design and construct a GT-MHR in Russia. The 50-50 partnership, according to a General Atomics announcement, will have "responsibility for completion of the GT-MHR development and testing, followed by fabrication, construction, and demonstration testing of the first module. A goal of the joint venture will be worldwide commercial sales of subsequent systems." The helium-cooled reactor offers "a very attractive opportunity to destroy weapons-grade plutonium made available by disarmament agreements, while simultaneously producing electricity."

The Russians and General Atomics expect agreements to be negotiated by the governments involved that would include a \$20 million a year contribution from the United States over five years for the development of a prototype. The Russian Federation Ministry for Atomic Energy will furnish the experimental facilities and related test hardware. The Russian helium-cooled reactor program had already developed advanced test facilities for many of the components necessary. Another major plus of the new system is that it can operate with either uranium or weapons-grade plutonium as its fuel.

This is obviously a very positive development, but why, we ask, should it not be extended to include all of the U.S. nuclear projects Clinton proposes to axe? *EIR* supports the effort by the magazine *21st Century Science & Technology*. Its Spring 1993 issue contains a postcard to President Clinton, urging him to reverse his decision to cut advanced nuclear R&D.