Why Now?

Q. Why should funders, policymakers, journalists, activists, and everyday people be concerned now about the potential for a nuclear power revival, especially since the last successful nuclear reactor order in the U.S. was placed in October 1973?

A. For more than a decade, the nuclear power industry has been steadily and stealthily laying the groundwork for a resurrection, following a plan set out in the early 1990s, modified a few times, and now called Vision 2020. This plan calls for the implementation of 50,000 Megawatts of new nuclear power, or about 50 new reactors, by the year 2020.

To reach this goal, the nuclear industry has reached a critical point: it must begin construction of new reactors quickly. And, for the first time in memory, it has the crucial political backing it has lacked for years and years: An Administration committed to nuclear power expansion; a Senate Energy Committee committed to nuclear power expansion; a House leadership committed to nuclear power expansion, and regulatory agencies, such as Nuclear Regulatory Commission, Environmental Protection Agency and Department of Energy, equally committed to such expansion.

This political influence has translated into the following urgent realities:

**Early Site Permits.** Three utilities have applied for Early Site Permits to build new commercial nuclear reactors. These utilities are Exelon, Entergy, and Dominion Resources. All three are among the leading nuclear utilities in the U.S., and besides having built their own reactors, all have purchased and operate existing reactors from utilities seeking to exit the nuclear business. Exelon is the world’s single largest private nuclear utility, Entergy and Dominion are not far behind.

Under the Early Site Permit (ESP) process, members of the public must participate at the time of the permit application, even though that application does not acknowledge that the utility even wants to build a reactor, much less what design or type of reactor the utility may eventually choose. Issues determined at the ESP stage include ability of...
emergency evacuation, adequacy of water flow for reactor cooling (extremely difficult to determine without knowledge of reactor design), environmental justice, presence of endangered species, and similar issues. These issues can only be addressed during this process—if public rights over these issues are abdicated by non-participation at this time, they can not be re-gained.

NIRS is intervening in all three Early Site Permit hearing processes, and is taking the lead at Grand Gulf because of our extensive experience working in that part of the country and on environmental justice issues—a key issue at Grand Gulf. We have helped set up new coalitions in central Illinois and Mississippi to organize against the industry’s expansion plans and are organizing with our existing allies in Virginia.

*New uranium enrichment plants.* Two companies are poised to file applications to build new uranium enrichment plants. These companies obviously perceive a need for future uranium enrichment technology that could only be met by the construction of new reactors—currently the world has a glut of enriched uranium, and will continue to have that for years to come due to the downblending of highly-enriched uranium into reactor fuel from the dismantlement of Russian nuclear weapons.

Yet these companies, U.S. Enrichment Corporation (USEC) and Louisiana Energy Services (LES) are willing to bet more than $1.5 Billion each that a market will exist if they are able to build new facilities.

USEC would build its new plant on one of its existing sites in Ohio or Kentucky. LES, which is dominated by the European firm Urenco, is more problematic, and wishes to build on new ground. LES originally proposed building in Homer, Louisiana in 1989, but following sustained citizen opposition and participation in six years of licensing hearings with substantial help from NIRS, was forced to withdraw following one of the first ever courtroom verdicts of environmental racism, by an NRC Atomic Safety and Licensing Board in 1997.

LES regrouped and in 2002 announced it would build its plant near Hartsville, Tennessee. Again, citizen opposition succeeded in challenging LES and environmental conditions were placed by local politicians that LES could not meet (involving radioactive waste storage and emissions). LES then decided to try again, this time in rural New Mexico near the Texas border, in a largely Hispanic area. NIRS and local citizens are now organizing to prevent this project and we are now engaged in a lengthy legal intervention against it before an NRC Atomic Safety and Licensing Board.

*Congressional Energy Bill.* The Energy Bill to be taken up by the U.S. Congress will likely be the most pro-nuclear energy bill ever to reach the floor of the Capitol. The bill will include billions of dollars worth of tax breaks for wealthy private utilities to build new nuclear reactors—as much as $15 Billion or more. It also will include authorization and funding to build a new “advanced” reactor in Idaho to produce hydrogen for the President’s hydrogen fuel cell program and reauthorize the Price-Anderson Act for new reactors (existing reactors already are covered), which limits utility liability in the event of a nuclear accident and includes special dispensation for advanced “modular” reactors.
Congressional passage of this bill would jumpstart the nuclear industry in a way that hasn’t been envisioned by the industry since the 1960s. Although the bill was stopped in the Senate in late 2003, congressional backers of the nuclear and fossil fuel industries have vowed to try again to enact a similar version in the new Congress.

*Climate Change.* The nuclear power industry is attempting to use genuine concern over climate change as a means of further promoting new reactor construction. They base this on the acknowledged fact that nuclear reactor operations contribute little to greenhouse gas emissions.

However, this position fails to take into account three key factors: 1) the entire nuclear fuel chain, including uranium mining, milling, processing, fuel fabrication, reactor operation and waste disposal, and including construction and operation of all these facilities, does account for substantial global warming emissions. The uranium enrichment plant in Paducah, Kentucky, for example, is the nation’s single largest emitter of ozone-destroying Chlorofluorocarbons—the plant was one of the few grandfathered in by adoption of the Montreal Protocol. In its entire fuel chain, nuclear power is nearly comparable to natural gas in emissions, while producing power as a much greater economic cost. Moreover, nuclear power has other serious environmental disadvantages, including risk of meltdown, so-far insoluble problems of lethal radioactive waste disposal, and, more recently, substantial national security concerns. 2) as has been pointed out time and time again by energy experts such as the Rocky Mountain Institute, use of nuclear power would be the single most inefficient method of addressing global warming emissions, costing as much as seven times as energy efficiency technologies at reducing the same level of greenhouse gases. The world simply cannot afford nuclear power as a solution to climate change. Indeed, use of nuclear power would be counterproductive at addressing climate change, as it would use the resources necessary to effectively meet this urgent challenge. 3) Most of the rest of the industrialized (i.e., nuclear) world has decisively rejected nuclear power as a means of addressing climate change.

During the COP6 meeting on the Kyoto Protocol in The Hague in November 2000, when the issue of use of nuclear power to meet Kyoto targets arose, NIRS and our affiliate WISE-Amsterdam mounted a major campaign against that prospect. In the end, nuclear power was soundly rejected, and is no longer considered a viable option in those countries that invented the technology. If the U.S. is to be a leader in development of energy sources that will be deployed by the rest of the world, it cannot rely upon technologies that have been rejected by nearly the entire globe.

**Why NIRS?**

**Veteran Staff:** NIRS has the most veteran and expert staff on nuclear issues available anywhere in the world. NIRS’ seven full-time staff in the U.S. have more than 100 combined years of experience on nuclear power issues. We know the technology, we know the issues, we know how to help people fighting nuclear power.
NIRS is the only organization with staff that straddle the first nuclear era to the upcoming second era, and thus the only one with enough sense of history to understand what worked previously, and what didn’t.

**Grassroots Empowerment:** NIRS’ function is to educate, instruct and empower the grassroots to take on nuclear issues and to fully participate in those procedures that exist to influence nuclear policy and specific fights such as construction of a uranium enrichment plant or new reactor. Numerous factors go into any successful struggle against a multi-billion dollar energy facility, and we certainly won’t assume that our role is prevalent in any such struggle. However, it is worth noting that since NIRS was formed in 1978, not a single new reactor has been ordered in the U.S.; dozens of reactors ordered have been cancelled, including several in which NIRS helped local groups with extensive participation, such as Zimmer (Ohio), Marble Hill (Indiana), Grand Gulf 2 (Mississippi); Louisiana Energy Services has been stopped, so far; and other potential facilities, such as the Yucca Mountain nuclear waste dump, the Private Fuel Storage nuclear waste dump, and a dozen or so “low-level” radioactive waste dumps have either been permanently stopped or delayed by years. This is a testament to the tenacity and effectiveness of the grassroots anti-nuclear movement, which persists to this day whenever people are threatened.

**International Capability:** In the face of increasing globalization of the nuclear power industry, when multi-national corporations prefer to run rampant over government efforts at restraint, only NIRS has developed an international focus to take on the atomic industry anywhere, anytime. Our newsletter, The Nuclear Monitor, is published in two English editions (one for North America, one for the rest of the world); a Russian edition, a Ukrainian edition, a Spanish edition and most recently a Japanese edition has begun publication. In 2000, NIRS and WISE (World Information Service on Energy) affiliated, and since then we have been working to establish working offices, with paid staff, across the globe. We now have offices in Washington, DC; Asheville, North Carolina; Amsterdam; Kaliningrad, Russia; Kyiv and Rivne, Ukraine; Brno, Czech Republic; Linz, Austria, and Rosario, Argentina. Other offices exist in Germany (WISE-Uranium, which concentrates on the front-end of the fuel chain); Slovakia, Korea, Japan, and South Africa.

This international capability allows us to both mount international campaigns on specific nuclear issues, to assist campaigns in one country from another (for example, taking on international banking interests) as well as trade information freely with may be useful from one country to another, but which may not be reported in the media.

*Michael Mariotte, February 2005*