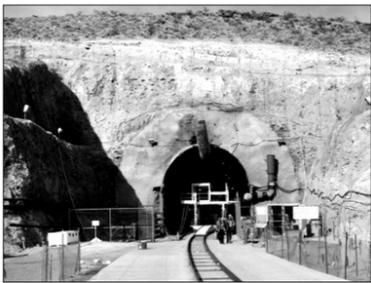
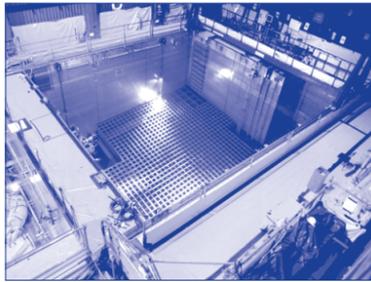


What's Happening *with* Nuclear Power?



Yucca Mountain.



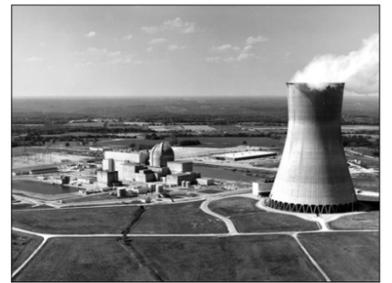
Spent fuel pool.



Yucca Mountain crest south.



Dry cask containers for used reactor fuel storage — Diablo Canyon.



The Callaway Nuclear Generating Station, Missouri.

A President who campaigned on change could revise the pro-nuclear policies of the Bush administration. The array of recent conflicting decisions and statements shows the confused state of nuclear energy policy in Washington, D.C. Many important decisions are yet to be made and what nuclear energy laws Congress will pass in the next several months is unknowable. But citizens have impacted recent decisions and can have a major role in the forthcoming far-reaching policy developments.

GNEP — NUCLEAR POWER NEARLY EVERYWHERE

The Bush administration championed the Global Nuclear Energy Partnership (GNEP), which promoted nuclear power expansion in the U.S. and in many other nations. However, thousands of people opposed GNEP in hearings in November and December 2008 and in written comments in early 2009 and advocated that the programmatic environmental impact statement (PEIS) process be stopped. (*Voices from the Earth*, Fall 2008.) On June 9, 2009, Department of Energy (DOE) Acting Assistant Secretary for Nuclear Energy Shane Johnson said: “We’re in the process of closing it [PEIS] out,” Johnson said. “We’re stopping where we are. We’re documenting all the comments received to date, and we’re putting a wrap on it, and putting it on the shelf of DOE history.” GNEP is dead. Or is it?

President Obama’s Budget for Fiscal Year 2010 was released on May 7 and included increased funding for Fuel Cycle Research and Development (R&D), which previously supported GNEP-related reprocessing (“separation processes”) technologies, from \$145 million to \$192 million. The budget document stated:

R&D on separations processes, transmutation, waste forms, and fuels, including the safety, cost effectiveness and security of these materials and processes, will continue. However, the program will be broadened in scope to support R&D on storage technologies, security systems, alternative disposal pathways (e.g. salt formation and deep borehole, etc.) and will begin revisiting the scientific considerations of long-term geologic storage in conjunction with the Office of Civilian Radioactive Waste Management (OCRWM).

YUCCA MOUNTAIN — THE HIGH-LEVEL NUCLEAR WASTE DUMP

Another part of the Bush administration support for nuclear power was to open the Yucca Mountain repository for commercial spent fuel and high-level waste as soon as possible to provide a solution for the long-standing waste disposal problem. The Obama Budget stated: “the Administration’s decision [is] to terminate the Yucca Mountain program while developing nuclear waste disposal alternatives.” On June 3, 2009, Rep. Mike Simpson of Idaho asked Department of Energy (DOE) Secretary Chu, “Is Yucca Mountain, as a permanent geological repository, dead?” Sec. Chu’s answer: “Yes.”

So Yucca Mountain also is dead. Or is it? The Nuclear Waste Policy Act (NWPA) which designated that site as the only repository requires that:

If the [DOE] Secretary at any time determines the Yucca Mountain site to be unsuitable for development as a repository, the Secretary shall — ...notify the Congress,

the Governor and legislature of Nevada of such termination and the reasons for such termination;...and report to Congress not later than 6 months after such determination the Secretary’s recommendations for further action to assure the safe, permanent disposal of spent nuclear fuel and high-level radioactive waste, including the need for new legislative authority.

Secretary Chu has not made such a public determination and has not provided the termination notice to Congress or to Nevada. The budget included funding for a panel of experts

...to evaluate alternative approaches for meeting the federal responsibility to manage and ultimately dispose of spent nuclear fuel and high-level radioactive waste from both commercial and defense activities. The panel will provide the opportunity for a meaningful dialogue on how best to address this challenging issue and will provide recommendations that will form the basis for working with Congress to revise the statutory framework for managing and disposing of spent nuclear fuel and high-level radioactive waste.

If there is such a panel, citizens and affected communities (which are throughout the nation) should play an important role in its deliberations and recommendations.



Byron Nuclear Generating Station, Illinois.

NEW U.S. NUCLEAR POWER PLANTS

On June 17, the Senate Energy Committee approved the “American Clean Energy Leadership Act,” which, among many other things, states:

It is the sense of Congress that the Federal Government should reaffirm the policy of the United States —
1) to support the use and expansion of nuclear energy technology for —

- a) the production of electricity and other industrial applications; and
- b) the reduction of greenhouse gas emissions; and

2) to fulfill the obligation of the Federal Government with respect to spent nuclear fuel and high level radioactive waste.

On June 10, many Republican leaders in the U.S. House of Representatives introduced “The American Energy Act” and stated that they support:

domestic exploration of our natural resources, and a renewed commitment to safe and emissions-free nuclear energy.... We lay down a national goal of licensing 100 new nuclear reactors over the next twenty years by streamlining a burdensome regulatory process and ensuring the recycling and safe storage of spent nuclear fuel.

The Energy Policy Act of 2005 already streamlined the licensing process, provided \$2 billion in risk insurance for the first six new nuclear plants, extended the Price-Anderson Act liability insurance for 20 years, established a production tax credit for the first eight years of a new plant’s operations, authorized loan guarantees for nuclear facilities, and funded “next generation” research.

When enacted, that law was hailed by John Kane of the Nuclear Energy Institute: “This is a great energy bill that will set the stage for nuclear to play a role in supporting our future economic development.” But the law now is apparently inadequate for the nuclear power industry that wants more regulatory streamlining and unlimited amounts of federal and ratepayer dollars.

That nuclear power is too expensive and too slow to provide for future electricity needs in the U.S. and to combat climate change has been well documented. (See *Voices from the Earth* Winter 2005 and Winter 2007.) A June 2009 study — *The Economics of Nuclear Reactors: Renaissance or Relapse?* — by economist Dr. Mark Cooper reviews past estimates and actual nuclear power costs. [Available online: [www.vermontlaw.edu/Documents/Cooper_Report_on_Nuclear_Economics_FINAL\[1\].pdf](http://www.vermontlaw.edu/Documents/Cooper_Report_on_Nuclear_Economics_FINAL[1].pdf)] The study concludes:

The low carbon sources that are less costly than nuclear include efficiency, cogeneration, biomass, geothermal, wind, solar thermal and natural gas. Solar photovoltaics that are presently more costly than nuclear reactors are projected to decline dramatically in price in the next decade. Fossil fuels with carbon capture and storage, which are not presently available, are projected to be somewhat more costly than nuclear reactors. The additional cost of building 100 new nuclear reactors, instead of pursuing a least cost efficiency-renewable strategy, would be in the range of \$1.9–\$4.4 trillion over the life the reactors.

Citizen opposition has helped to kill the GNEP PEIS, so there is no further need to object to and litigate that document. But some R&D for reprocessing and some international cooperative efforts to promote nuclear energy will continue. Multi-billion-dollar federal funding to build new reprocessing facilities seems very unlikely in the next few years.

The Obama administration wants to prevent Yucca Mountain from being used for nuclear waste disposal. But the administration does not yet know what changes in the law can pass Congress to implement that decision. Secretary Chu supports a “blue ribbon” commission and the Senate Energy Committee bill includes a version of such a panel. But Congress has yet to pass any new laws or budgets regarding Yucca Mountain or other storage and disposal options. It appears that it will be 2010 or later before any definitive action reverses the 1987 congressional law that made Yucca Mountain the high-level waste and spent fuel repository.

Moreover, the nuclear power industry is pushing for major new government commitments that might be included in energy and climate change legislation. Meanwhile, citizens around the country are opposing licenses and rate increases for new nuclear power plants. 🦋