# Nuclear

# Power



# **Prevent Harm & Shut Down Dangerous Plants**

#### Threats to Public Safety

There are 103 nuclear power plants operating in the U.S., and more than 440 worldwide. Each one is a potential "Chernobyl", capable of a devastating accident that spews out lethal radiation and poisons people across the globe. These reactors release radiation—a known human carcinogen—into our air and water even during normal operation, and produce radioactive waste that remains poisonous for thousands of years—yet no safe, long-term storage methods have been developed.

The nuclear industry's fear of a catastrophic accident is so great, they will not operate their reactors without a federal guarantee—the Price-Anderson Act (up for renewal in 2003)—that they will not be held liable for damage caused by nuclear accidents. This Act also prevents homeowners from purchasing insurance to cover damages from a nuclear accident. The threat of terrorism has also shown how vulnerable nuclear reactors are to sabotage.

#### Health Effects

Radiation is invisible, odorless, tasteless and tears at the very fabric of what makes us human—our genetic material. Children and the unborn are especially susceptible because of their rapid and abundant cell division during growth. In addition to cancer and birth defects, evidence exists that radiation is permanently mutating the gene pool and contributing to its gradual weakening, resulting in "developmental deficiencies in the fetus, hereditary disease, accelerated aging, and such non-specific effects as loss of immune competence." [The New Scientist]. Since nuclear reactors routinely pollute our environment with radioactive substances like strontium-90, there needn't be an accident to cause disease.

#### Aging Reactors

Many reactors have aging components, inadequate maintenance and oversight, and challenges safely storing radioactive waste on-site since there are no safe, permanent disposal sites. Reactors in Maine, Connecticut, Oregon, and Illinois were shut down due to unsafe conditions and high operating costs. An Ohio plant that failed to conduct routine inspections was criticized by the Nuclear Regulatory Commission (NRC) Inspector General for placing financial concerns above public safety. A survey of NRC staff found nearly one-third believe NRC is not adequately concerned with public safety.

#### Safer Alternatives

Safer alternatives exist for making electricity—such as natural gas, wind power (the fastest-growing U.S. power source), solar power, and newly developed hydrogen-powered fuel cells—that can meet our nation's energy needs without the harmful effects of radiation. (See *Green Energy* Brochure).

**BE SAFE: Take Precautionary Action To Replace Nuclear Power With Safe, Clean Energy Sources** 

## **BE SAFE's FOUR PRINCIPLES**

### **1. HEED EARLY WARNING SIGNS**

Workers and people living near nuclear power plants, storage and disposal facilities, and uranium mines have an increased risk of cancer from routine exposure to radiation. Nuclear accidents can affect everyone—remember Three Mile Island's near meltdown in Pennsylvania? Who can forget Russia's Chernobyl disaster that scattered radioactive dust across the globe, causing cancer in thousands of people and contaminating food supplies on several continents? The problems of waste disposal, public safety, health threats, accidents, and the exorbitant costs of operating reactors have stopped construction of new nuclear power plants in the U.S.—we must heed these early warning signs and close the 103 nuclear power plants still in operation.

### **2. PUT SAFETY FIRST**

We must put safety first and eliminate the many pathways for radioactive pollution from nuclear power to cause harm.

- **Mining:** Reactor fuel is mined from deposits deep in the ground—a process that leaves radioactive "tailings" and other waste to pollute our land and water.
- **Transportation:** Transporting nuclear materials to and from mines, manufacturing facilities, reactors, and disposal sites pose grave public health risks as these potential "dirty bombs" or "mobile Chernobyls" travel over our roadways.
- **Routine Releases:** Reactors regularly release radioactivity into the air we breathe and our waterways.
- **Meltdowns:** Reactors are susceptible to "meltdowns" that can release massive amounts of highly radioactive material into communities and across the globe.
- **Waste:** Reactor fuel remains poisonously radioactive for thousands of years, yet no safe, permanent storage facilities have been identified. So-called "low-level" radioactive waste is buried in trenches and landfills that leak, and is deliberately used as raw materials to make household items.

## **3. EXERCISE DEMOCRACY**

No new nuclear power plants have been built in the U.S. since 1973—a sign of this technology's safety and economic shortcomings. However, the nuclear industry and its government supporters have recently attempted to set the stage for building new plants by circumventing public involvement in licensing decisions, encouraging use of our tax dollars by private utilities, and reducing regulatory oversight of nuclear operations. Already, a new uranium enrichment plant is being proposed in New Mexico, while utilities in Illinois, Mississippi and Virginia are openly talking about building new plants. Communities across the U.S. have stopped construction of many proposed nuclear power plants. Government and industry need to prioritize public safety and implement a timely phase-out plan to shut down existing plants and ban construction of any new plants.

BE SAFE is coordinated by the Center for Health, Environment & Justice. To sign the platform or for more information, contact us at CHEJ, P.O. Box 6806, Falls Church, VA 22040, 703-237-2249, or 518-732-4538, or visit **www.besafenet.com** 

## 4. CHOOSE THE SAFEST SOLUTIONS

#### Buy Green Power.

In a growing number of states, people can buy "green power" and support electricity supplied by renewable and other clean energy sources. For information on: green power providers, go to **www.green-e.org**; and for renewable energy technologies, contact Rocky Mt. Institute at **www.rmi.org**.

#### Support a Nuclear-Free future.

Contact Nuclear Resource & Information Service at **www.nirs.org** and Public Citizen's Critical Mass Energy and Environment Program at **www.citizen.org/cmep.** To receive Action Alerts, with information on how you can make a difference, send your e-mail address to **nirsnet@nirs.org**.

#### BE SAFE.

Take precautionary action to protect our health from nuclear power radiation. Sign on to the BE SAFE Platform on the next page. Be counted when we deliver this national Platform to the White House in 2005. Endorse the BE SAFE Platform today at **www.besafenet.com.** 

#### Your Vote Counts.

The next election will set the country's course on nuclear power policies. For information on state and federal environmental voting records, contact **www.sierraclub.org** and **www.lcv.org**. To register to vote, contact **www.earthday.net**.

# Communities Put Safety First & Successfully Shut Down Dangerous Nuclear Power Plants

California voters permanently closed Sacramento's Rancho Seco nuclear power plant via a 1989 voter referendum. Voters elected a new board for the municipally-owned utility that chose to become a national leader in aggressive energy efficiency programs and support of renewable energy resources.

Citizens Against Nuclear Trash (CANT), a multi-racial community group, defeated a proposed uranium enrichment plant in Homer, Louisiana in 1997 after eight years of organizing, litigation, and participation in the NRC licensing process. CANT showed industry that organized communities can win a clear-cut victory-leading the NRC to issue their first denial of an operating license, and the first court finding of environmental racism in the country. In 2003, citizens of Hartsville, Tennessee organized and prevented the same company from building a plant in their neighborhood.

#### **References**:

The New Scientist, October, 1997; NRC Inspector General, December 30, 2002; A Reevaluation of Cancer Incidence near Three Mile Island Nuclear Plant, Env. Health Perspectives, Jan. 1997; Childhood Leukemia following the Chernobyl accident, European Journal of Cancer, 1992; Radioactive Waste: Politics, Technology and Risk, UCS, 1980 Ballinger; High Level Dollars, Low Level Sense, Institute of Energy and Env. Research, 1992, Apex Press.

Primary Contributor: Michael Mariotte, Nuclear Information & Resource Services (NIRS).

# **BE SAFE Platform**

In the 21st century, we envision a world in which our food, water and air are clean, and our children grow up healthy and thrive. Everyone needs a protected, safe community and workplace, and natural environment to enjoy. We can make this world vision a reality. The tools we bring to this work are prevention, safety, responsibility and democracy.

Our goal is to prevent pollution and environmental destruction before it happens. We support this precautionary approach because it is preventive medicine for our environment and health. It makes sense to:

- Prevent pollution and make polluters, not taxpayers, pay and assume responsibility for the damage they cause;
- Protect our children from chemical and radioactive exposures to avoid illness and suffering;
- Promote use of safe, renewable, non-toxic technologies;
- Provide a natural environment we can all enjoy with clean air, swimmable, fishable water and stewardship for our national forests.

We choose a "better safe than sorry" approach motivated by caution and prevention. We endorse the common-sense approach outlined in the BE SAFE's four principles listed below.

# **Platform Principles**

#### **HEED EARLY WARNINGS**

Government and industry have a duty to prevent harm, when there is credible evidence that harm is occurring or is likely to occur—even when the exact nature and full magnitude of harm is not yet proven.

#### **PUT SAFETY FIRST**

Industry and government have a responsibility to thoroughly study the potential for harm from a new chemical or technology before it is used—rather than assume it is harmless until proven otherwise. We need to ensure it is safe now, or we will be sorry later. Research on impacts to workers and the public needs to be confirmed by independent third parties.

#### **EXERCISE DEMOCRACY**

Precautionary decisions place the highest priority on protecting health and the environment, and help develop cleaner technologies and industries with effective safeguards and enforcement. Government and industry decisions should be based on meaningful citizen input and mutual respect (the golden rule), with the highest regard for those whose health may be affected and for our irreplaceable natural resources—not for those with financial interests. Uncompromised science should inform public policy.

#### **CHOOSE THE SAFEST SOLUTION**

Decision-making by government, industry and individuals must include an evaluation of alternatives, and the choice of the safest, technically feasible solutions. We support innovation and promotion of technologies and solutions that create a healthy environment and economy, and protect our natural resources.



#### Take precautionary action to protect our health from nuclear power radiation. Sign onto the BE SAFE Platform.

Be counted when we deliver this national platform to the White House in 2005. Endorse the platform today at **www.besafenet.com** 

BE SAFE is coordinated by the Center for Health, Environment & Justice. To sign the platform or for more information, contact us at CHEJ, P.O. Box 6806, Falls Church, VA 22040, 703-237-2249, or 518-732-4538, or visit **www.besafenet.com**