



Nuclear Information and Resource Service

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Don't Believe the Hype — Nuclear Power is DIRTY Energy

The NCEW website suggests nuclear power is “clean” energy — just like wind, solar, and hydropower. Don't be fooled by this deceptive marketing. Nuclear power is one of the dirtiest ways to generate electricity — as well as the most dangerous and most expensive. The industry is trying to cover up its track record to justify billions of dollars in new subsidies for old reactors.

Nuclear power makes millions of tons of radioactive and toxic waste every year, endangering human health and the environment for hundreds of thousands of years. Despite these impacts, nuclear power remains one of the most heavily subsidized energy sources. In fact, nuclear subsidies have often cost more than the value of the electricity the industry produces.

Uranium Mining: A Mountain of Waste

Nuclear reactors are fueled with uranium, a radioactive metal. The 99 reactors in the U.S. generate 2,000 tons of high-level nuclear waste each year. To make the fuel, uranium must be mined and milled, then “enriched” to make the fuel fissile — capable of a nuclear chain reaction. Producing fuel rods results in 25,000 pounds of radioactive, toxic waste for every pound of fuel that goes into a reactor: over 50 million tons of radioactive waste every year, before a single watt of electricity is made.

Radioactive Waste and Water Resources

Operating nuclear reactors produces more radioactive waste and consumes vast amounts of water. A typical reactor uses over 1 billion gallons of water every day, damaging fisheries and abusing water resources. Reactors routinely release radioactive material into the environment, and generate a wide range of radioactive wastes. Used nuclear fuel is millions of times more radioactive when it is removed from the reactor, and remains hazardous for hundreds of thousands of years. And after a reactor shuts down, the decommissioning process generates thousands of tons of waste and costs well over \$1 billion.

Unacceptable Safety and Security Risks

Reactors are vulnerable to mechanical failure, natural disasters, sabotage, and attack. A reactor meltdown or fuel pool fire can contaminate whole regions of the country, causing illness, displacing thousands to millions of people, and costing hundreds of billions of dollars. The impact of a single reactor failure poses unwarranted risks to national security and the U.S. economy.

Costly and Uncompetitive

Nuclear energy is fundamentally uneconomical—declared the greatest managerial failure in business history 30 years ago. Despite massive subsidies and incentives from the federal and state governments, building reactors resulted in more project cancellations than operational power plants, and nearly bankrupted many utility companies. It is even worse today. Dozens of aging reactors are too expensive to operate. Only four new reactors have begun construction. They are all years behind schedule, billions over budget, and bankrupted their manufacturer, Westinghouse. Two have now been cancelled and the remainder may be soon. The industry is hoping state and federal governments will provide billions of dollars in subsidies to keep this uncompetitive, dirty energy source afloat.

The truth is, nuclear power is too dirty, too dangerous, too expensive, and too slow. It has no place in our country's energy future.