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Nuclear power currently supplies about 20 percent of the electricity produced in the United States. Well before the 1979 accident at the Three Mile Island nuclear power plant, UCS was a leading watchdog on nuclear safety. Since then we have expanded our work to include the security of nuclear facilities, the implications of the nuclear fuel cycle for the spread of nuclear weapons, and the expansion of nuclear power in the United States as one option to reduce global warming.

It is clear that nuclear power in the United States is riskier than it should—and could—be. The United States has strong safety regulations on the books, but the federal agency that oversees the nuclear industry—the Nuclear Regulatory Commission (NRC)—does not enforce them consistently. Moreover, current security standards are inadequate to defend nuclear plants against deliberate attacks. In addition, if the United States or other nations begin to separate plutonium from nuclear waste (called "reprocessing"), this would create another, more serious security threat. Plutonium can be used to build nuclear weapons, and because it is not highly radioactive, it is vulnerable to theft. Thus, a major accident or successful attack could kill or injure tens of thousands of people and contaminate large regions.

Because the life cycle carbon emissions of nuclear reactors are very low—comparable to wind power—they can play a role in addressing global warming. However, the potential benefits must be balanced against the unique risks and high costs of nuclear power.

To address these issues, UCS experts monitor nuclear power plant operations and practices, conduct technical and economic analyses, and advocate common-sense, pragmatic recommendations to the administration, Congress and the NRC to make nuclear power safer and more secure.

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