

The Nuclear Train Wreck

- Although the nuclear industry claims that nuclear power is a solution to climate change because the generation of electricity from nuclear power does not create carbon dioxide, the front and back ends of nuclear power generate large quantities of carbon dioxide. Plus nuclear energy creates toxic and dangerous radioactive waste throughout its life cycle. Nuclear power has a big carbon footprint beginning with the mining for uranium, the processing of the mined uranium into nuclear reactor fuel, and the transportation of the fuel to nuclear power stations.
- Nuclear power is prohibitively expensive to build, to fuel, and to decommission at the end of its life. The plants require many years, between 10 to 15 years, to site and build and are subject to cost overruns and delays. All of these costs are borne by the ratepayers. Wind and solar energy can be installed much more rapidly and more cheaply.
- Nuclear power is propped up with tax-payer subsidies, including the Price Anderson Act that limits the plant owner's liability in the event of an accident
- Nuclear material poses a risk to workers, both to miners and to employees at the nuclear power plant
- No long-term disposal of nuclear waste has been built. Nuclear waste remains radioactive for thousands of years, posing a risk to the public if the material is not properly disposed of. Many generations in the future will be required to monitor and protect the radioactive waste.
- Nuclear waste is harmful to humans, presenting a risk to the public should a terrorist gain access to it.
- Nuclear waste can be diverted and converted to nuclear weapons, leading to the proliferation of nuclear weapons.
- A nuclear accident could endanger citizens who live miles away from the power plant. An accident could render many acres of land uninhabitable and unusable for farming. Iowa is the breadbasket for the world; an accident could affect the world's food supply.



Spent fuel dry cask storage. Photo courtesy Nuclear Regulatory Commission

- By spending on a nuclear plant, funds are diverted that might be spent on 21st Century energy -- energy efficiency and clean and renewable energy, such as wind, solar, battery storage, and geothermal.
- Large amounts of water are also used in mining activities. The mining is environmentally destructive. Likewise large amounts of water are used in cooling the reactors. This need for water limits where nuclear reactors can be sited.
- Nuclear power is not flexible in its output, so it can only be used to supply a consistent level of power. Yet when the nuclear power plant must be shut down for repairs, maintenance and upgrades of equipment, or fuel reloading, the power must be acquired for another source.
- The cost of nuclear power is increasing, while cost of renewable energy is going down. What's more is that the cost to fuel a solar panel or wind turbine is free; uranium to fuel a nuclear power plant requires expensive processing.



Cooling towers at a nuclear power plant. Photo courtesy Nuclear Regulatory Commission

Iowa Chapter Policies

- Nuclear power plants should not be given special incentives and regulatory preferences in order to build.
- Consumers should not be required to pay for the nuclear power plant before it is built, through schemes such as construction work in progress and advanced cost recovery. The rate-making principles should be the same for nuclear power as they are for natural gas, wind or coal power.
- The Chapter supports moving to 21st century energy, such as wind and solar, accompanied by programs to increase energy efficiency and conservation. These alternatives to nuclear power are adequate, safe, sustainable, affordable, clean, and renewable.

Nuclear Power Is Not The Answer to Climate Change

**Renewable energy
– wind, solar, battery storage, and geothermal –
is the power source for the future**