

NUCLEAR POWER AND URANIUM MINING

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Contrary to industry propaganda nuclear power contributes substantially to global warming. Fossil fuels used to mine and enrich uranium, construct and decommission the reactor, transport and store the intensely radioactive waste for eons of time produce global warming gases. Presently a gas fired electricity generator emits three times more CO₂ than a similar sized atomic reactor, but as the supply of high grade uranium ore declines, a nuclear plant will, within decades, generate as much CO₂ as a gas fired generator. Uranium supplies are finite. If global electricity was nuclear generated today, only nine years supply of uranium remain.

Despite massive government subsidies in the US, Wall Street and Standard and Poors are reluctant to invest in nuclear power having been severely burnt in the 1970s and 80s when Three Mile Island and Chernobyl caused the cost of nuclear reactors to soar. The 2005 US energy bill allocated \$13 billion to the nuclear "renaissance" because the nuclear industry is simply not viable without government support.

Nuclear power is a tenuous investment. A nuclear accident or terrorist attack would signal the end of nuclear power. David Lochbaum, a nuclear engineer from the Union of Concerned Scientists says "It is not if but when there is a meltdown" because of lax and inefficient safety procedures overseen by the Nuclear Regulatory Commission at the 103 operating US reactors. A meltdown could permanently contaminate an area the size of Pennsylvania with over 100 radioactive elements.

Surprisingly security has virtually not been tightened at the 103 US reactors since 9/11 even though one of the targets of the terrorists was the Indian Point reactor complex 35 miles from Manhattan.

Nuclear power is medically dangerous. Operating nuclear reactors routinely emit radioactive materials into the air and water including the fat soluble noble gases, xenon, krypton and argon which are readily absorbed through the lung and migrate in the blood to fatty tissues of the abdominal fat pad and upper thighs where they irradiate the reproductive organs with high doses of mutagenic gamma radiation. Carcinogenic tritium - radioactive hydrogen is also routinely released.

But more is at stake. 30 tons of highly carcinogenic nuclear waste is manufactured yearly in each reactor which is stored in cooling pools adjacent to the reactors. A terrorist attack on a pool containing 10 to 30 times more radiation than the reactor itself could release massive amounts of radiation devastating surrounding communities and agricultural areas for ever.

Nuclear waste must be isolated from the environment for at least 250,000 years, a physical and scientific impossibility. Odourless, tasteless and invisible radioactive isotopes seep and leak into the environment, where

they concentrate in the food chain, enter the human body, and migrate to specific organs irradiating and mutating surrounding cells for many years. The incubation time for cancer is insidious - 5 to 60 years. Over time, future generations will inevitably experience epidemics of cancer, leukemia and genetic disease.

Nuclear power is a transient generator of electricity but its actual legacy will be medically catastrophic. Public health denotes that if a disease is incurable the only recourse is prevention. Uranium mining and its offspring nuclear power are therefore medically contraindicated.