

No More Nuclear Power

by Dorothy Boberg

The public has spoken in many forums for years: **NO MORE NUCLEAR POWER PLANTS!** They are too expensive, too dangerous, too polluting, too damaging to our health, too challenging to terrorists, too prone to encourage worldwide nuclear proliferation and will *not* answer the global warming problem. California law prohibits *new* plants until the highly radioactive wastes can be permanently disposed of in a government-approved repository. The nuclear industry, however, is now trying to create a renaissance for the failed nuclear plants by rebuilding them in stages, such as replacing the radioactive steam generators within the containment structures of San Onofre II and III. The industry is proposing new plants in other states that may allow them, and the Bush administration has enthusiastically embraced industry's propaganda as its own policy.

But we have to look at how much fossil fuel energy it takes to build and operate one 1000 megawatt nuclear reactor; to mine and mill the uranium, neutralize the tailings, convert uranium to U hexafluoride, enrich uranium from natural U238 to U235, fabricate the fuel elements, produce the products to construct the reactor, build the reactor infrastructure, decommission and dismantle the reactor, clean up the site, dispose of the radioactive waste, build the needed vehicles, transport the high and medium level waste to long term storage and guard the waste for 240,000 years.

It may be impossible for most laymen to understand the several hundreds of petrojoules of fossil fuels needed for the nuclear fuel cycle, but it is not impossible to accept the obvious concept that it takes more fossil fuel expenditures for one reactor than the reactor can produce in power in its lifetime.

Dr. Helen Caldicott reports that it takes 162 tons of natural uranium each year for one nuclear plant. If the uranium is from granite ore, 40 million tons must be mined or 80 million tons after providing for chemical treatment of the ore. "The extraction of uranium from this granite rock would consume over 30 times the energy generated from the uranium."

Uranium is in short supply. If all electricity worldwide were to be generated from nuclear power, all the known reserves of uranium would last nine years. In the same case, uranium from high grade ores would last three years. Any reprocessed uranium becomes a security problem because it can be used for nuclear bomb proliferation.

In addition to the truth of negative energy from nuclear power after using fossil fuels to produce it, the monetary costs have not been honestly reported. What is the cost to the public of the \$13 billion in subsidies in the 2005 Energy Bill? What is the cost of the

stranded investments paid by customers of nuclear energy when a plant lasts only 28 of the promised 40 years life, and then they pay again to rebuild such plants as San Onofre II and III? What does the federal government funded Price-Anderson insurance cost the taxpayers to protect nuclear companies from loss? How much will taxpayers pay for Homeland Security, which has, to date, done little or nothing to secure the existing 103 nuclear plants? What are the medical costs for the hundreds of individuals who have contracted cancer, leukemia and injured DNA from the operation and accidents at nuclear plants? This includes Three Mile Island, the partial meltdown of the sodium cooled reactor in 1959 at the Santa Susanna Field Laboratory in the west San Fernando Valley, California, and Idaho Lab SL-1.

Scientists are telling us that to cope with global warming, reduce nuclear injuries, reduce our energy costs, and to meet our future energy needs, we must forego building nuclear plants and go directly and at once to conservation and alternative, distributive, renewable energies such as co-generation, wind, solar, small hydro, geothermal, biofuels and tidal wave power.

It may be too late to make the necessary transitions if we continue on the nuclear path!

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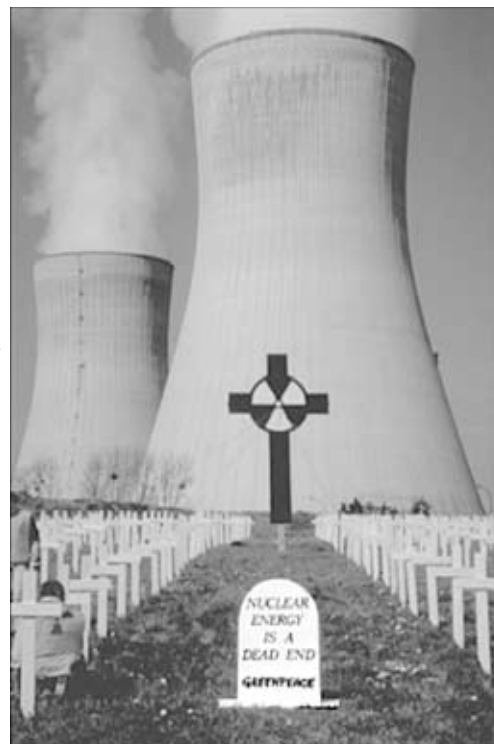


photo: Greenpeace

California Coastal Commission Request

California law prevents building *new* nuclear plants in California. However, the California Coastal Commission, on May 8, 2008, voted unanimously to allow replacement of two radioactive steam generators now enclosed in the domes of San Onofre II and III. At this hearing, five members of Creed (Coalition for Responsible and Ethical Environmental Decisions) testified against this proposal as no information was available about when or where the removed radioactive generators will be moved from the San Onofre beach. Creed asked the Coastal Commission to take the lead in requesting state governmental officials to regain the responsibility to protect the health and safety of California citizens by returning the authority of the federal Nuclear Regulatory Commission for Radiation Safety to the California Department of Health - Radiological Health Section. Creed has good evidence that the NRC has not been responsive to the health and safety needs of the public, but rather supports whatever corporate utilities request in order to rebuild San Onofre II and III by piecemeal replacement of plant parts starting with the opening of the containment domes and removal of the radioactive steam generators.