

The G-8's Risky Nuclear Embrace

This is an opinion article

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At their summit in St. Petersburg this weekend, leaders of the G-8--the world's richest economies--are poised to endorse a major expansion of nuclear power as part of the "energy security" agenda proposed by Russian president

Vladimir Putin. Leaked drafts of the summit's final communique mirror a statement released by energy ministers of the eight nations, which read, "For those countries that wish, wide-scale development of safe and secure nuclear energy is crucial."

Nuclear power is often perceived as a potential counter to climate change because nuclear plants release much less carbon dioxide than coal or natural gas plants do. But aside from the safety and security risks of nuclear power, the fact is that the atom's unfavorable economic performance means that going nuclear would actually make climate change worse.

During the lead-up to the summit, Russia and the United States have been the strongest pro-nuclear voices. France, which generates nearly 80 percent of its electricity in nuclear reactors, is a strong supporter as well. Germany and Italy remain opposed, both having passed laws prohibiting additional nuclear power plant construction.

But the country to watch is Britain. The pro-nuclear argument got a strong push earlier this week when Prime Minister

Tony Blair's government endorsed nukes as a crucial weapon in the fight against climate change. The endorsement came as part of the government's new energy policy. While that policy includes increased reliance on wind and other forms of renewable energy, nuclear power is expected to make, in the words of Alistair Darling, the trade and industry secretary, a "significant contribution" to cutting carbon emissions.

The Blair government's announcement triggered a political firestorm in Britain. The embrace of nuclear power, which had been rejected by a government White Paper on energy in 2003, was widely attacked both by environmentalists to Blair's left and the two opposition parties to his right.

But there is a big catch in Blair's nuclear plan--one that could settle the question once and for all of whether nuclear power makes sense as a response to global warming.

The catch is that Britain will not publicly subsidize nuclear power. According to Secretary Darling, private investors alone must pay to finance, construct, operate and eventually dismantle any new nuclear plants. They also must help pay to dispose of the plants' radioactive waste--an activity whose cost is unknown, since scientists remain uncertain about how to store the waste safely.

This no-subsidy pledge amounts to a revolution in nuclear economics. There are 440 nuclear plants now operating around the world. Not one of them was built without sizable public subsidies.

Governments have subsidized nukes both directly--through R&D funding, cheap loans and guaranteed insurance--and indirectly, by allowing electric companies to pass billion-dollar cost overruns onto consumers. The US government has historically spent ten times more on nuclear subsidies than it has for solar, wind and other renewable energy sources, according to studies by the Renewable Energy Policy Project and the energy policy analyst Charles Komanoff (*Ed: anti-nuclear activist*). Perhaps the most critical subsidy is the Price-Anderson Act, which shifts most of the liability for a major accident at a US reactor to the federal government--in other words, the taxpayers. Without Price-Anderson's protections, no nuclear plant would remain in operation, as pro-nuclear legislators point out every time the act comes up for renewal by Congress.

(Ed: This is where the writer leaves facts behind.)

Despite these ongoing subsidies, nuclear power remains forbiddingly expensive. A recent MIT study calculated that in the United States, nuclear power costs 6.7 cents per kilowatt hour. That's nearly 50 percent higher than natural gas, coal or wind, and it is vastly higher than energy efficiency, the least polluting form of electricity.

None of this stops nuclear industry flaks from regularly claiming, as one did not long ago on public radio, that nuclear power is the cheapest electricity around--a statement so deliberately misleading, it qualifies as a lie. It's true that nuclear's operating costs--for fuel, labor and personnel--are low. But its capital costs--for buying the reactor, concrete and other materials and, above all, for borrowing the money needed to finance years of construction and permitting--are astronomical. (*Ed: not so in terms of costs per-kilowatt-hour even including costs for waste disposal.*)

In short, saying nuclear power is cheap is like saying a Rolls-Royce is cheap. It's true, but only if you count just the money you spend on gas and repairs, not the price of buying the car in the first place.

Investors know all this. That's why nuclear power survives today only in countries like Russia, China and France, where state-controlled electricity systems can ignore market forces.

"The financial outlook of nuclear power has always been, and remains today, poor," says Brice Smith, (*Ed: anti-nuclear activist*), an analyst at the Institute for Energy and Environment Research and author of *Insurmountable Risks: The Dangers of Using Nuclear Power to Combat Global Climate Change*. "Nuclear is seen as such a risk that Standard & Poor's issued a report in January saying that despite all the new nuclear subsidies the Bush Administration inserted in the 2005 Energy Act, S&P still might downgrade the bond rating of any utility company that ordered a nuke."

If G-8 leaders want to honor last year's pledge to fight climate change, they need to understand that going nuclear would actually represent a big step backward. Because nuclear power is so expensive, it delivers seven times fewer greenhouse reductions per dollar invested than boosting energy efficiency does.

Tony Blair--like George W. Bush, for that matter--says it's not an either/or question; we need energy efficiency and nuclear power and lots of other energy sources in the future. But in the real world, capital is scarce. To divert capital to nuclear when efficiency can work so much faster would delay our transition to a low-carbon economy when in fact we need to accelerate it.

It's hard to believe Blair doesn't know this. In any case, he's in for a big surprise if he truly expects any nuclear plants will be built anywhere, without continued subsidies from the public purse.