ALBERT WOHLSTETTER'S LEGACY



The Neo-Cons, Not Carter, Killed Nuclear Energy

by Marjorie Mazel Hecht

The conventional wisdom in the nuclear community and in general is that President Jimmy Carter drove the nail in the civilian nuclear coffin when he stopped the reprocessing of nuclear fuel in 1976. But this is wrong. The dishonor does not belong to Carter. The policy that ended nuclear reprocessing was first promoted under the Ford Presidency, in a 1975 policy paper written under Ford's chief of staff Dick Cheney. And long before the Ford

Administration, the idea that civilian nuclear power was bad, and that reprocessing should be stopped, was extensively argued by Albert Wohlstetter, one of the most ghoulish, secretive, and influential of U.S. nuclear strategists, from the late 1950s to his death in 1997.

Wohlstetter was a University of Chicago mathematician-logician and a RAND consultant, who kept himself in the shadows as he mentored some of the most public of today's neo-conserva-

Wohlstetter was even stranger than the "Dr. Strangelove" depicted in the 1964 movie of that name. An early draft of the film was titled "The Delicate Balance of Terror," the same title as Wohlstetter's best-known unclassified work. Here, a still from the film.

tives-Paul Wolfowitz, Richard Perle, and Zalmay Khalilzad, to name a few. In Wohlstetter's circle of influence were also Ahmed Chalabi (whom Wohlstetter championed), Sen. Henry "Scoop" Jackson (D-Wash.), Sen. Robert Dole (R-Kan.), and Margaret Thatcher. Wohlstetter himself was a follower of Bertrand Russell, not only in mathematics, but in world outlook. The pseudo-peacenik Russell had called for a preemptive strike against the Soviet Union, after World War II and before the Soviets developed the bomb, as a prelude to his plan for bullying nations into a one-world government. Russell, a raving Malthusian, opposed economic development, especially in the Third World.

Admirer Jude Wanniski wrote of Wohlstetter in an obituary, "[I]t is no exaggeration, I think, to say that Wohlstetter was the most influential *unknown* man in the world for the past half century, and easily in the top ten in importance of all men."

"Albert's decisions were not automatically made official policy at the White House," Wanniski wrote, "but Albert's genius and his following were such in the places where it counted in the Establishment that if his views were resisted for more than a few months, it was an oddity." Wanniski also noted that "every editorial on America's geopolitical strategy that appeared in the Wall Street Journal during the last 25 years was the product of Albert's genius."

Like Bertrand Russell, Wohlstetter saw the world in terms of a bounded chess-board of U.S. and Soviet nuclear missiles, where his clever gaming strategies would ensure that more of "them" were killed than of "us." His strategic policies were madder than MAD (Mutually Assured Destruction), which he found too juvenile in concept. Instead, he supported flexibility—the preemptive strike, high-precision weaponry with precision target-

64 Spring–Summer 2006 **21st CENTURY** NUCLEAR REPORT



Courtesy of the University of Chicago.

Albert Wohlstetter in a photo from the 1960s.

ting, and "nimble" military units. This is precisely the thinking behind Secretary of Defense Donald Rumsfeld's revamping of the U.S. military, which was designed by longtime Pentagon consultant Andrew Marshall, another Wohlstetterite.

Wohlstetter rated his scenarios in terms of their death tolls, with the aim of allowing America to come out with the least damage. And, like Russell, while he loved playing with nuclear weapons, Wohlstetter hated civilian nuclear energy: He saw that it had the potential to allow unlimited population growth, which was impermissible in his worldview.

Unlike other nuclear strategists and Dr. Strangeloves, Wohlstetter writes relatively clearly, though tediously and exhaustively logically, often using statistical arguments to "prove" his points. He has no understanding of physical economy or of development, just crude cost-benefit analyses. His view of human beings in all this is that of a grade-B cowboy film-good guys versus bad guys, where everything possible must be done to keep control in the hands of his good guys: the financial oligarchy or, as President Eisenhower labelled it, the "military-industrial complex." It is no surprise, therefore, that his prize student, Paul Wolfowitz, wrote doctoral dissertation under Wohlstetter (published in 1972) arguing at length that nuclear desalination for







Wohlstetter's Weenies: Although Wohlstetter kept to the shadows, his protégés are very public. Clockwise: Richard Perle, former chairman of the Defense Policy Board, an advisory panel to the Pentagon; Paul Wolfowitz, former Deputy Defense Secretary, now president of the World Bank; Zalmay Khalilzad, U.S. Ambassador to Iraq; and Ahmed Chalabi, former leader of the Iraqi National Congress.



the Mideast was a very bad idea-costly, unnecessary, and dangerous.

A Delicate Balance of Insanity Wohlstetter's first acclaimed paper, published in 1958, was "The Delicate Balance of Terror," which reportedly so enthralled Richard Perle, then a high school chum of Wohlstetter's daughter, that it got Perle started on his "Prince of Darkness" career as a Wohlstetterite.

While Wohlstetter was working on Pentagon contracts, calculating killratios of missiles and chessboard missile moves, he developed the argument that civilian nuclear power was no good in itself, that it would only lead to the ability to make nuclear bombs, and that nonproliferation had to be enforced to make sure that bad guys didn't get any nuclear bombs. To put this policy across, he used his mathematical skills to scare



Stuart Lewis/FIRNS

people, in classified briefings with military and other government officials, as well as Congressmen, which trickled down to the general public.

One of Wohlstetter's last public articles, published on April 4, 1995, by his longtime neo-con friend Robert Bartley, editor of the Wall Street Journal, argued that the Non-Proliferation Treaty was bad, because it makes it easier for nations without nuclear weapons to gain access to them-using plutonium produced in civilian nuclear reactors. "It has long been plain that plutonium for electric power has a large negative value. The civilian benefits are a myth. The military dangers are real and immediate."

This is the essence of what Wohlstetter promoted in the 1960s and 1970s. He created the myth that civilian benefits of nuclear energy "are a myth." As the Wall Street Journal identified Wohlstetter in his 1995 op-ed, he "headed the 1975 study that led the U.S. to abandon the use of plutonium fuel for civilian power reactors."

Atoms for War

In the 1960s, when the civilian nuclear program was still moving forward under the philosophy of Atoms for Peace, launched by President Eisenhower in his famous 1953 speech at the United Nations, Wohlstetter pushed his "atoms for war" policy. While FDR Democrats and Republicans were elaborating visions of what the atom could do for peace in the world, providing energy, desalinated water, and process heat for industry, Wohlstetter marshalled his math to stop civilian atoms.

In 1967, Wohlstetter was the invited luncheon speaker at a Manhattan Project 25th anniversary event at the University of Chicago. He told the assembled nuclear scientists that there were no short-term civilian benefits to

nuclear energy. The scientists who created the bomb, he said, wanted to find compensatory benefits for humankind for their wartime creation of destruction. But, he warned, "Some of these civilian uses have a large war potential. ... [T]here is a massive overlap between the technology of civilian nuclear energy and that of weapons production. The good military atom therefore doesn't displace the bad military one. Expanding civilian use in general makes it easier, quicker, and cheaper to get bombs. . . . An essential trouble with nuclear plowshares, therefore, is that they can be beaten into nuclear swords. . . . "

Wohlstetter noted that the nuclear energy forecast in 1967 envisioned that by 1980, nuclear would supply 25 percent of U.S. electricity, with large reactors at costs competitive with electricity from fossil fuels. And then this "genius" informed the nuclear scientists: "Nonetheless it has been clear that such important benefits fall short of ushering in the golden age.

They will not abolish want and are unlikely to reduce the great inequalities between rich and poor countries." As to why this was the case, Wohlstetter noted that energy costs are just a small percentage of the gross national product, and "cheap energy can help, but is not the key to economic progress."

Wohlstetter was particularly concerned that the Middle East remain free of nuclear power plants to desalt water, and to convey to his scientist audience that poor countries would not be able to gain from capital-intensive power reactors. As for breeder reactors, Wohlstetter's view was only negative. Instead of seeing the benefit of a reactor that produced more fuel than it consumed, he said that if breeder reactors came into operation as the U.S. Atomic Energy Commission expected by 2000, "there may be a million bombs worth of civilian plutonium in the world, doubling every ten years."

As negative as was this 1967 speech, it was short, and at least mentioned that in

The Inside Job Against Nuclear Energy

While Albert Wohlstetter's nuclear report put a hold on nuclear development from the top down, other forces were squeezing nuclear development from the bottom and middle levels of policy-making. Such a squeeze required the right sort of bureaucrat and the right bureaucracy to carry out the anti-nuclear thrust, and so the Ford Administration at the end of 1974, removed Dixy Lee Ray, the pronuclear chairman of the Atomic Energy Commission; and Congress abolished the agency, and reorganized energy policy into a mishmash agency known as the Energy Research and Development Administration.

(Dr. Dixy Lee Ray, who had been brought into the Atomic Energy Commission by President Nixon in 1972, was a scientist and an FDR Democrat, who fought to expand nuclear and educate the public about every aspect of nuclear technology. She went on to become governor of Washington state, and she continued to fight for nuclear energy expansion.) Under the Carter Administration,

66

nuclear energy was squeezed again, into being just another energy office in the new Department of Energy, headed by "energy czar" James Schlesinger, a Wohlstetter colleague at RAND who was then, and still is, anti-nuclear. The regulatory oversight for nuclear energy was given to the newly created Nuclear Regulatory Commission.

In this same time period, 1975, the Ford Foundation released a 450-page tome on nuclear energy, "Nuclear Power: Issues and Choices; Report of the Nuclear Energy Policy Study Group," purporting to be "fair" but arrived at by a group of Establishment academics, many of whom had the Russellite credentials Wohlstetter. As the overview to this report states, "We believe the consequences of the proliferation of nuclear weapons are so serious compared to the limited economic benefits of nuclear energy that we would be prepared to recommend stopping nuclear power in the United States if we thought this would prevent further proliferation." The overview went on to

say, however, that such a course of action could "increase the likelihood of proliferation, since the United States would lose influence over the nature of nuclear power development abroad."

The most striking aspect of the Ford Foundation study is that it has the same Mickey Mouse approach to economics as Wohlstetter et al. There is no concept of physical economy or a "science driver." Everything is measured in strict cost-benefit terms, without any idea of development.

On the ground level in this period, was a growing swarm of environmentalist groups, hatched by the counterculture and the campus turmoil during the Vietnam War period. These were the most visible of the anti-nuclear forces, in the media and on the street. But the policies they carried out came straight from the neo-con pen of the shadowy Albert Wohlstetter and the lower-down Establishment figures who conducted the Ford Foundation study. The environmentalists and the so-called "left" were the legs, not the head of the anti-nuclear movement.

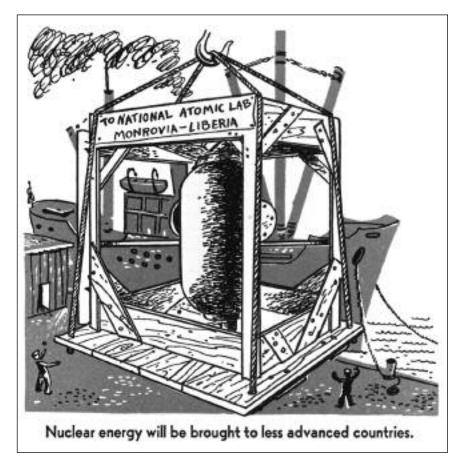
Spring–Summer 2006 21st CENTURY SPECIAL REPORT

the long-range future, nuclear energy might have some benefit. In Wohlstetter's 1975 report, "Moving Toward Life in a Nuclear Armed Crowd?" the message is incessantly negative—for 286 pages. This report was prepared for the U.S. Arms Control and Disarmament Agency "to provide a clear definition of trends in the spread of nuclear technology, and a precise analysis of the problems (political, military, and economic) that these trends pose for policy."

Wohlstetter and his co-authors presented a statistical Mickey Mouse economic analysis of nuclear energy, which was designed to prove that civilian nuclear power is too costly, that reprocessing spent nuclear fuel is not essential and a money loser, that breeder reactors are too dangerous even to be seriously considered, and that nuclear energy retards development in the developing sector. In these pages is everything the anti-nuclear environmentalists and lawmakers could draw on to make sure that Wohlstetter got his antinuclear way. The overriding argument for Wohlstetter was that civilian nuclear energy can only be meaningfully measured in bomb-production capacity.

The report particularly targetted the Less Developed Countries (LDCs). "Investment in nuclear energy is a poor choice among alternatives for the economic development for the LDCs," the report stated. "It diverts capital from more productive uses. . . . [I]nstead of speeding economic development and slowing the spread of military technology, as we had hoped for decades, the subsidized transfer of nuclear technology has slowed development and may speed the spread."

For Wohlstetter et al., the benefits of nuclear energy were "exaggerated" because of the emotions connected to the dropping of the bombs on Hiroshima and Nagasaki. "In fact," the report stated, "if we could have detached ourselves" from these emotions, "we might have more easily questioned that subsidizing civilian nuclear energy was the way to stop the spread of the military technology. Since civilian and military nuclear energy programs overlap so extensively, a more plausible course might have been to subsidize research and development on the improvement of fossil fuels or of more exotic nonnuclear alternatives such as solar elec-



The nuclear optimism that scared Wohlstetter: This illustration is from a children's book in the 1960s, describing the benefits of nuclear energy.

tric or geothermal power."

Taking note of the nuclear optimism still in operation, the Wohlstetter report listed the projections for civilian nuclear plants in the 1990s, and then offered suggestions of how such growth could be derailed—exactly what occurred. "This large growth is not inevitable," the report stated. "It presumes the carrying through of plans, negotiations, and constructions not yet committed and of varying degrees of firmness; some have had setbacks. The growth, moreover, is open to influence, a subject for the elaboration of policy of supplier as well as recipient governments."

Unflagging Pessimism

Wohlstetter's pessimism was unflagging. The report reiterated in every section how "nuclear power promises very limited economic benefits to less developed countries." "In all likelihood," the report wishfully stated, "history will reveal that once again the nuclear optimists have greatly overestimated the future growth of

nuclear power." And another favorite theme: "Every time a new country obtains a nuclear power reactor, it is moving significantly closer to a nuclear weapon development capability, since the plutonium produced by all nuclear reactors can be made into nuclear weapons."

Like Wohlstetter's tediously exhaustive strategic analyses, this report reviewed every aspect of how every country might be able to make bombs with their civilian nuclear reactors, and what might be done to constrain this. The main constraints from the Wohlstetter point of view were simple: stop nuclear technology, stop reprocessing, don't even think about breeder reactors, load on the statistics equating power plants with bombs, and don't mention any new technology development. His constraints worked. From this evil-minded Russellite neo-con, who remained in the shadows, came the antinuclear policies that have kept nuclear technology suppressed for 30 or more years.

A SPECULATOR, A PRINCE, AND A NEO-CON

Who's Sabotaging the PBMR?

by Dean Andromidas

There is an ongoing international campaign to block South Africa's development of the Pebble Bed Modular Reactor (PBMR), the small high-temperature nuclear reactor that promises to produce cheap and abundant energy for all of Africa. The campaign brings together mega-speculator George Soros, the U.S. neo-cons, the Danish government, and the Prince Consort to the Danish Queen.

The PBMR is a joint venture of South Africa's state electricity company Eskom, the state-owned Industrial Development Authority, and Westinghouse, which was recently sold by British Nuclear Fuels to the Japanese company Toshiba. The inherently safe nuclear reactor design, which would produce between 110 and 165 megawatts of electric power, represents the ideal solution for bringing cheap electrical power to vast areas of Africa, Asia, and Ibero-America, where millions of people continue to live in a "dark age" because of the lack of electricity.

Eskom, the South African state electricity company and major shareholder in the project, plans to begin building a demonstration reactor by 2007. In South Africa alone, the company intends to build at least 30 reactors to expand the nation's electricity grid to the 30-40 percent of the population lacking electric power.

While for Africans the prospect of abundant power can only be welcomed with open arms, for powerful international financial interests, such a prospect poses a far greater "existential threat" than any nuclear-armed "rogue state." As the speculative financial bubble of the world financial system is on the verge of bursting, the control of the massive raw materials of Africa, including its gold, diamonds, oil, copper, and uranium, is essential to the very survival of the international financiers. It is the massive flows of funds buying up these resources which have led to the "resource wars" of the last decade, espe-

68



Stuart Lewis/EIRNS

Mega-speculator George Soros funds the South African environmentalist groups to attack economic development projects like the PBMR, and thus protect his raw materials looting.

cially those that have hit central Africa, the Democratic Republic of the Congo, and the Great Lakes region.

It is not surprising, in this context, that the Bush Administration's international "War on Terror" has set up bases in Africa's Sahel, where rich deposits of gas have been discovered, as well as uranium and other strategic raw materials.

A preliminary investigation by *Executive Intelligence Review* has revealed that the "usual suspects" are intimately involved in this operation. They are the environmentalists, backed by powerful international financial and political interests who operate like gangsters.

Soros: The 'Capo di Tutti Capi'

At the top, operating like a racketeering mafia boss, is mega-speculator George Soros, who finances local environmentalists and other useful dupes,

and deploys them as tough guys to attack nuclear energy as "unsustainable." At the same time, these deployables promote so-called "sustainable" technologies, like wind turbines and solar energy, both of which are totally incapable of sustaining an industrial economy.

Since the collapse of the high-tech bubble in 2000, Soros has shifted his investment strategy from high-risk currency speculation to investment in physical assets, especially raw materials, gold, silver, and so on. Africa plays a large role in this strategy. With George's brother Paul Soros, investments have been made in African mining companies and state-owned companies which governments are being forced to privatize by conditionalities imposed on them by the World Bank and the International Monetary Fund. Valuable assets, including mines, plan-

Spring–Summer 2006 21st CENTURY SPECIAL REPORT

tations, and other agro-investments, have been bought up by Soros and the international corporations he supports financially.

Through his "Open Society" network of foundations, Soros organizes the "street" against the government and power centers that stand in the way of his financial operations. Thus, he puts into power those leaders who will implement the appropriate freemarket laws. One celebrated example was the so-called Orange Revolution in Ukraine.

In South Africa, George Soros operates through his Open Society Foundation, based near Cape Town. The Foundation's major source of funding is from the profits of the Soros Fund Management, LLC and other entities from which Soros rakes in billions of dollars annually. According to U.S. Securities Exchange Commission filings dated Sept. 30, 2005, among the many companies in which Soros Fund Management holds millions of dollars in stock are mining companies with huge assets in Africa. These include Anglogold Ashanti Ltd., which controls one of the largest gold mines in the world, which the government of Ghana was forced to privatize, and Barrick Gold, the Canadian company that bankrolled the overthrow of the Mobutu regime, leading to a decade of civil war in the Democratic Republic of the Congo. Other companies include Newmont Mining, which has mines in Ghana, and the Ibero-American-based Apex Silver, in which Soros holds very large interests and has placed his brother Paul on its board of directors.

Although Soros has publicly compared President George W. Bush to Adolf Hitler, that has not stopped him from holding stock in the Iraq War mega-profiteer firm Halliburton, whose former CEO was Vice President Dick Cheney.

Another Soros stockholding directly related to our story is in the Exelon Corporation, whose decision to withdraw its investment from the PBMR project in April 2002 almost led to the project's collapse.

Sabotage

In 1999, when the process for gaining the authorization for the building



of a PBMR demonstration plant was under way, the Soros apparatus moved to sabotage it.

The Environmental Justice Project of the Legal Resources Centre, which is funded by Soros's Open Society Foundation, commissioned one Stephen Thomas to write a report trashing the PBMR and nuclear energy in general in 1999. At the time, Thomas worked at the Science Policy Research Unit of the University of Sussex, in Great Britain; he now

works for the Public Service International Research Unit of the University of Greenwich, also in Great Britain. The report was then handed over to Earthlife Africa, a South Africa-based environmentalist organization which used the report as documentation for a court action to prevent approval for going forward with the PBMR demonstration plant.

This court action was supported not only by the Legal Resources Centre, but by the Open Democracy Advice Centre, which provided legal and financial assistance. This latter entity is also financed by Soros's Open Society Foundation. It is a joint venture of the Black Sash Trust and the

Henrik, the Prince Consort of Denmark, has championed windmills as a Danish export, especially in the developing sector, and funded the opposition to the PBMR. Above, one of Denmark's royally subsidized windfarms on the southwest coast.

Rigmor Mydtskov/www.denmark.dk

Institute for Democracy, both of which are also financed by the Open Society Foundation.

The Thomas report, which has gone through several versions, is a piece of sophistry, which makes no attempt to deal with the technological feasibility of the project. For instance, in an earlier version of the report, Thomas trashes high-temperature-reactor technology as problematic, citing how the Chinese program was allegedly moribund. In its latest version, the report cites the same "moribund" Chinese program as representing a major potential competition to the South African PBMR!

But the key point of Thomas's report is

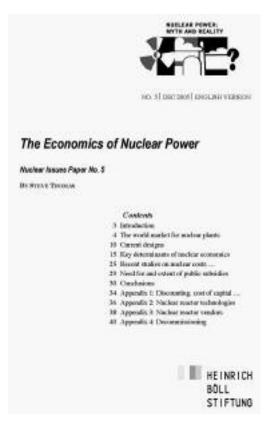
its analysis that nuclear power is not compatible with energy liberalization and privatization of state electricity companies like Eskom. It asserts that Eskom will inevitably face being broken up and privatized. Thomas's 1999 report states: "The momentum for liberalization throughout the world now seems unstoppable and, sooner or later, Eskom is going to have to give up its monopoly status and run its business under competitive pressures."

But Thomas makes clear that these "pressures" are the higher profit-rates the radical, globalized free market is demanding. Thomas draws the comparison with the privatized British utilities: "Government-owned utilities have usually been able to invest money at very low rates of return on capital partly because new power stations were seen as a safe investment and partly because, for a variety of reasons, governments have tended to require a lower rate of return on capital than private industry. Thus, in Britain before privatisation, the national utility, the CEGB, could invest at a 5 per cent real (net of inflation) rate of return and recover the costs over 35 years. After privatisation, it is known that private investors are looking for about 12-15 per cent real return and recover the capital over 15-20 years."

This is exactly what George Soros and globalization are all about: Destroy the institutions of the nation-state in the name of higher profits. It is not just the PBMR that these financiers oppose, but the very idea of a state-owned public sector, because it serves as a driver for real economic development instead of profits that will be taken out of the country.

Since 1999, when Thomas's words were written, the world has seen Enron and other such disasters which have done much to discredit privatization and deregulation of the energy sector.

Earthlife Africa and the Legal Resources Centre were able to block the approval of the PBMR's environmental impact study on a technicality, forcing the study to be redone. But they lost another case, in which they had demanded the release of the minutes of the meetings of the government commission that was formed to assess



"No probative value," was the verdict of a South African court on one of Steve Thomas's reports on nuclear energy. Here the title page from his December 2005 report.

the environmental impact of PBMR. This latter case was thrown out of court in January 2006 and Earthlife had to pay the costs. The judges ruled that the study by Thomas, which was submitted as evidence, had "no probative value." Earthlife also lost its appeal of the decision on this case this month.

Windmills and the Prince

Soros is not the only financial backer of the anti-PBMR campaign. The other is the Kingdom of Denmark and the Consort to the Queen, Prince Henrik. The Danish International Development Agency (DANIDA), which is the Danish government's official aid organization, is also funding the operation. DANIDA finances the Environmental Justice Project of the Legal Resources Centre as well as Earthlife Africa's Sustainable Energy and Climate Change Project. The latter is also financed by the World Wildlife Fund Denmark, the Danish chapter of the World Wide Fund for Nature, whose founder

and chairman is Prince Henrik. (The other founders of the WWF were also European royalty—Britain's Prince Philip and the Netherlands' Prince Bernhard.)

Like Soros's "philanthropy," this aid is not to help the "little people," but has a real profit motive: killing off the competition. Denmark is the largest world exporter of wind turbines, and since 1984 DANIDA has been financing projects throughout the developing world, where Danish-made wind turbines are being built.

For example, DANIDA was instrumental in establishing the wind turbine industry in India and lent support to India's "wind energy pioneer," Rakesh Bakshi, upon whom, in 1997, was conferred the "Diploma of the National Association for Danish Enterprise and His Royal Highness Prince Henrik's Medal of Honour."

Where DANIDA financing goes, the Danish wind turbine companies closely follow, and Danish wind turbine manufacturers, like Vestas, have estab-

lished Indian subsidiaries.

The DANIDA projects are being carried out throughout the world, including Africa. One of the most extensive is in Egypt, where DANIDA helped fund the Zafarana wind farm, along with the German government's Kreditanstalt für Wiederaufbau (Bank for Reconstruction). The project's 105 turbines are supplied by the Danish-Germany company Nordex. In South Africa, DANIDA financed a wind farm in Darling, which is situated in the Western Cape, and an experimental wind station of three turbines operated by Eskom.

It is significant that German government financing was secured at the time when the Green Party was a coalition partner in the government led by Gerhard Schröder. The Green Party's Heinrich Böll Foundation is actively supporting the anti-PBMR campaign in South Africa and has financed South African environmental activist David Fig to write a book attacking the South Africa nuclear industry.

The Unsustainability of 'Sustainable' Energy

A glance at the Danish wind turbine industry demonstrates that, without government sponsorship and subsidy, the industry would rapidly collapse, because an electric generator that depends on wind is by definition totally inefficient—especially when there's no

As the top exporters, the Danes have several companies ranging from small wind turbines to monsters that would even frighten Don Quixote.

It is a very special industry. Take Gaia Wind, which produces small 11-kilowatt wind turbines. Named after the Earth goddess, it was set up by the Gaia Trust, founded by Ross Jackson, an American expatriate and "spiritualist" living in Denmark. Jackson is a retired speculator who first financed the trust through his Gaiacorp, one of the world's first hedge funds dealing with special forms of currency derivatives. Gaia Wind, along with the Danish wind-turbine consultancy Kentec, won funding from DANIDA for a feasibility study in Africa.

On the other side of the spectrum is Vestas Wind Systems, the largest windturbine manufacturer in Denmark, which makes monster 4.5-megawatt ocean wind turbines. Its history parallels the growth pattern of the industry, which has been based on political and financial backing of the Danish and other governments.

Vestas started making wind turbines in 1978, experiencing a lackluster sales record until 1981, when California passed special tax legislation that made investment in wind turbines profitable. The company expanded until it had 800 employees, while providing the U.S. market with 2,500 wind turbines. But when the California tax legislation expired in 1985, Vestas went from riches to rags, and in 1987, the company was reorganized, retaining only 60 workers.

Although this collapse is testimony that the industry is only "sustainable" through government support, its revival was through government support as well.

According to Vestas's website, in 1989 "powerful political forces seek to strengthen the Danish wind turbine

industry." These "powerful political forces" not only in Denmark but in neighboring Germany, shifted their governments' policies away from nuclear energy into wind, solar, and other alternative energy sources with tax incentives, financial support, and legislation decreeing that thousands of megawatts of energy had to be generated by wind turbines, whether or not technically or commercially viable. Vestas soon captured one-third of the huge German market, which expanded greatly after the German Green party entered the government in 1998.

Vestas then grew to employ 10,000 people with subsidiaries all over the world. Many of its projects in the developing sector are financed by DANIDA. But while foreign sales boomed, in 2001, a new government came to power and put an end to government support. The Danish internal market collapsed to the point that in 2004, only five wind turbines were erected in all of Denmark. This situation changed only after the Parliament passed legislation in 2004 mandating an additional 750 megawatts of new wind power.

It is one thing for rich countries like Germany and Denmark to make insane decisions to throw away taxpayers' money on wind turbines, and quite another for the countries of Africa, most of which are desperately poor, to expend limited resources on an inefficient and dead-end technology.

The PBMR and the Neo-Cons

Meanwhile, in the United States, the attack on the PBMR came from two very related sources.

The first was a report used in the above-mentioned Earthlife Africa case, which was written in 1999 by Dr. Edwin S. Lyman of the Nuclear Control Institute of Washington, D.C. The South African court stated that this report was written



Nuclear Control Institute

The Nuclear Control Institute's Paul Leventhal, like the late Albert Wohlstetter, defines civilian nuclear plants as bombs in the making.



NUCLEAR CONTROL INSTITUTE

The last slide from a 2001 presentation by Dr. Edwin Lyman, then of the Nuclear Control Institute, summarizing his thoughts on the PBMR.

CONCLUSIONS

Barriers to new nuclear deployment are numerous and formidable

Proposed PBMR licensing schedule insufficient to allow resolution of safety

Highly questionable whether nuclear power can successfully and safely imitate gas turbine deployment model

Nuclear Control Institute

Chernobyl

Continued from page 63

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72

in such a highly technical style that it was unintelligible!

What is the Nuclear Control Institute? Run by Paul Leventhal, it is committed to stopping all nuclear power because it will allegedly lead to nuclear proliferation. This is the line now promoted by the neo-conservatives in and around the Bush Administration. It was pioneered by the late Albert Wohlstetter, one of the demigods of the neo-cons, who equated civilian nuclear reactors with atomic bombs. Wohlstetter's chief disciple was Paul Wolfowitz, former Deputy Secretary of Defense and now head of the World Bank. Wolfowitz, who wrote his doctoral thesis under Wohlstetter as an attack on nuclear desalination in the Mideast, is deeply committed to preventing any development nuclear energy in the Third World.

Unlike the Danes, Leventhal doesn't push wind turbines, but preemptive strikes. He is a member of the Iran Policy Committee, which calls for "regime change" in Iran. This committee is the extreme of the extreme. One board member, for example, is Gen. Paul Vallely (ret.), who was featured in *EIR*'s special report on the "spoon-benders" in the U.S. military (see "Cheney's 'Spoon-Bender' Pushing Nuclear Armageddon," *EIR*, Aug. 26, 2005). Vallely is not only for air strikes, but also for ground assaults against Iran.

It is curious that EarthLife Africa and the Legal Resources Centre, both of which claim to support the "little people," would team up with such an extreme group as the Nuclear Control Institute

The second U.S. attempt to derail the PBMR was through the withdrawal of the U.S. energy company Exelon. The move came after the project's chief sponsor in Exelon, Corbin A. McNeill, retired as chief executive officer and chairman in 2002. McNeill's support for PBMR dates back to when he was chairman of PECO energy company, which later merged with Unicom Corporation to form Exelon in 2000. A retired captain of the U.S. fleet of nuclear submarines, McNeill was an enthusiastic supporter of the PBMR project. He especially saw the project as ideal for the countries of the developing sector.

McNeill's successor, John W. Rowe, immediately cancelled Exelon's support of the project on the grounds that it did not fit into his strategic plan for the company. A lawyer by training, Rowe is a very different type of CEO than McNeill, and did not share the latter's passionate commitment to nuclear energy, despite the fact that Exelon is the largest operator of nuclear power stations in the United States. According to industry sources, Rowe is a fanatical believer in the "shareholder value" ideology which underpins globalization and radical free-market policies.

Unlike the retired military officer McNeill, Rowe is a man of the business establishment, fancies himself a philanthropist, and belongs to all the right clubs. But politically he is close to the neo-cons, just like Leventhal. Until recently, he was a trustee of the American Enterprise Institute, better known as the Temple of Doom, a center of the neo-conservative movement in Washington, where both Dick Cheney and Donald Rumsfeld worked. Rowe participated in many of the seminars, conferences, and other affairs held in the Institute's "Wohlstetter Hall," and perhaps met there another frequenter of these events, Paul Leventhal.

Rowe also sits on the National Commission on Energy Policy, along with R. James Woolsey, a Wohlstetterite and former CIA director, now very prominent among the neo-conservatives who want the United States to launch a strike against Iran.

There is now a renewed debate throughout Europe and the United States on nuclear energy. Finland is already building the first new nuclear power station in Europe in 10 years. Russia and China have announced the intention to build dozens of new nuclear power stations over the next quarter century. Africa has to become part of this process if it hopes to survive the ravages of globalization.

The PBMR project is on the front lines of that fight, and intends to win.

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