COMMENT

Should greens support nuclear power?

Thursday 5 May 2011, by WILLIAMS Chris (Date first published: 4 May 2011).

Chris Williams, author of *Ecology and Socialism: Solutions to Capitalist Ecological Crisis*, argues that support for nuclear power has no place in the green movement.

Give the people what they want,
What they want, what they want:
Clean air and no pollution.
— Jimmy Cliff

FEW PEOPLE can cut to the heart of the matter with such clarity, brevity and artfulness as music legend Jimmy Cliff, a man who knew a thing or two about making transcendent, timeless and captivating reggae tunes.

As when he first put those words to paper, people around the world are calling for a world with clean air and no pollution. However, unlike Cliff's time, activists in the Green movement, including those on the left end of the Green spectrum, are split on whether fighting for a future with clean air and no pollution could potentially include nuclear power.

A debate has emerged, precipitated by the well-known British environmental journalist and campaigner George Monbiot, as he has openly, if somewhat reluctantly, embraced the Dark Side: a nuclear-powered green future. One person, writing a comment on a previous article of mine [1], accused me of advocating genocide because I continue to argue against nuclear power.

After hydrogen explosions had blown the roofs off two reactor buildings in mid-March, and the radioactive fires of Fukushima blazed, like a latter-day Gen. "Buck" Turgidson of Dr. Strangelove fame, Monbiot wrote a column on March 21 entitled "Why Fukushima made me stop worrying and love nuclear power" [2]:

"As a result of the disaster at Fukushima, I am no longer nuclear-neutral. I now support the technology...Atomic energy has just been subjected to one of the harshest of possible tests, and the impact on people and the planet has been small. The crisis at Fukushima has converted me to the cause of nuclear power."

Monbiot's nuclear renaissance rests on a classic lesser-evilism argument. His premise, and that of others in the Green movement who have been converted to nuclear energy, is that if we oppose nuclear power and manage to halt the re-licensing or building of new nuclear plants, what we'll get in their stead are coal-fired power stations. Because the mining of coal around the world routinely kills thousands of coal miners from accidents and the nature of the mining process itself, alongside corporate corner-cutting on health and safety, and because burning coal creates toxic air pollution

that annually kills approximately 13,000 people in the U.S. alone and produces more CO_2 than nuclear power, we have to back nuclear as the lesser of two evils.

What this argument ultimately boils down to however, is a lack of belief that ordinary people have the power to change society. If we don't have nuclear goes the argument, we'll get coal, because these are the only energy sources that ruling elites will countenance. In fact, this is one of the nuclear industy's own talking points; whenever they discuss the CO_2 savings of a new nuclear plant, it's always in comparison to whether the same plant would be replaced by a coal plant. This artificially inflates the supposed benefits, as if that's the only other viable choice on offer.

But surely, it stands to reason that if the anti-nuclear movement can prevent the much-vaunted "nuclear renaissance," couldn't we also build a movement that restricts and ultimately shuts down the coal industry? Indeed, wouldn't a victory over ending the resurrection of the nuclear power industry make a victory against the coal corporations—who are often the very same companies—enhance rather than detract from a successful fight against coal?

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IN A rather bizarre argument in the midst of the escalating nuclear catastrophe in Japan, Monbiot goes further and argues in an April 5 column [3] that even when nuclear accidents happen, very few people actually die. He takes to task anti-nuclear activists who have "misled us all"—as if it's the anti-nuclear movement that is the problem, shackling the corporations' desire to build new, clean nuke plants with all its unsubstantiated talk of deaths and deformities arising from the 1986 nuclear disaster at Chernobyl.

According to Monbiot, very few people were affected by the explosive release of a massive cloud of radioactivity on April 26, 1986. Of the ones who were, any negative health effects, such as death, birth defects, leukemia, thyroid and other cancers, were almost entirely due to the incompetence of the Soviet authorities, rather than the predictable outcome of having the misfortune to live next to an exploding nuclear reactor.

Radiation is a natural part of our world and has many useful medical and other uses as either a diagnostic tool, a method of investigating the properties of our universe, or a medical treatment. All living things contain minute quantities of radioactive isotopes, as do many rocks and chemical compounds. The fact that the center of the earth is still a molten mass of iron and nickel is in large part due to the heat generated from radioactive decay in the core. Our knowledge of the characteristics of radiation has allowed us to accurately date all manner of things from the age of the earth to the evolution of species through time and the rise and fall of once-great civilizations, leading to a greatly enhanced knowledge of how our culture, planet and universe has changed over time.

The nuclear furnace at the center of our sun makes all life on earth possible in the first place. Scientists understanding of radioactive decay series forms the basis of important strands of evidence that highlight how and why climate has changed during earth's history, and given rise to the science of climate change—a change which currently threatens humanity due to the quantity of CO_2 production that results from the rampant burning of fossil fuels.

However, medical research now concludes that there is no safe level of radiation [4], and any elevation of radiation levels or exposure to increases, particularly when young or over prolonged periods of time, increases an organism's chances of cell damage and mutation, which can result in cancer in the host and/or deformed or nonviable offspring. Radioactive particles taken into the body through the lungs or via eating and drinking contaminated food or water is particularly dangerous.

Furthermore, a number of studies of the health effects of the Chernobyl disaster have shown how thousands of people have either died or live in the shadow and perpetual threat of cancer. While estimates vary greatly, in a roundup of different studies, Dr. Lisbeth Gronlund, a senior scientist and co-director of the Global Security Program at the Union of Concerned Scientists, gave a best estimate of "34,000 to 140,000 excess cancer cases, of which 16,000 to 73,000 would be fatal." [5]

Tens of thousands of deaths is hardly an insignificant number. Contrary to Monbiot blaming the anti-nuke movement for misleading the world, the history of lies and cover-ups by the corporations that run the plants, seeking to turn a profit from an inherently unstable and dangerous energy extraction process, is well documented.

The Union of Concerned Scientists obtained internal documents of the Nuclear Regulatory Commission (NRC), the body that oversees the U.S. nuclear industry, under the Freedom of Information Act, and it concluded [6]: "[T]here is no consensus within the NRC that U.S. plants are sufficiently protected. The documents indicate that technical staff members doubt the effectiveness of key safety measures adopted after the September 11, 2001 terrorist attacks." As one writer commented [7], "Therefore, it remains highly uncertain whether the U.S. would be better prepared than the Japanese to manage the aftermath of such severe events."

While France is often held up as the nuclear poster child, in the wake of Fukushima, even the conservative, pro-nuclear French press has publicized an upcoming government report that shows, "[L]ast year alone, more than 1,000 accidents of different intensity had happened in the country's atomic power plants." [8]

And as for the reliability of nuclear plants being able to operate continuously, the *Times of London* reported how in the summer of 2009, France had to import large quantities of electricity through undersea cables from Britain because drought forced the closure of their nuclear plants [9]:

"France is being forced to import electricity from Britain to cope with a summer heat wave that has helped to put a third of its nuclear power stations out of action…One power industry insider said yesterday that about 20GW (gigawatts) of France's total nuclear generating capacity of 63GW was out of service."

Hence, the increased frequency of droughts and summer heat waves brought on by climate change will make nuclear plants increasingly susceptible to shutdowns because of the massive quantities of water that are continuously required to cool them and the higher temperatures of the rivers themselves.

And in Japan itself, the industry has been dogged by a succession of cover-ups, corruption scandals and accidents [10].

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THE INCREDIBLY intricate safety systems, multiple independent back-ups and fail-safes that the industry talks so much about are all testament to how dangerous and unstable the process is. The fearsomely complicated safety systems that are required highlight one of the many Achilles heels of nuclear power generation: It is wildly uneconomic when compared to alternatives.

Splitting apart atoms of uranium, which are 0.0000001 of a meter across simply to boil water to make steam to generate electricity was always a mad idea. The addition of more safety systems to nuclear plants, which one hopes the nuclear operators will carry out as a result of the lessons of Fukushima if we don't shut them down first, will only add to the cost and make it an even less viable energy source.

Compare this to wind or solar power: no nuclear waste, no danger of calamitous accidents and the irradiation of the environment for hundreds of years and unlimited supply—plus, once built, wind farms and solar arrays are a free source of energy, aside from ongoing maintenance costs.

It is no coincidence that Japan, having traveled down the nuclear road to the point that almost one-third of its electricity supply comes from nuclear power, has the least developed renewable energy sector of any developed country. The vast sums of government money required to run a nuclear program actively detract from developing clean alternatives.

Furthermore, one of the many other negative side effects of having energy generation based on a technology that was evolved primarily from military uses and that continues to have deep and abiding connections to the manufacture of nuclear weapons and proliferation is the level of secrecy and opaqueness that shrouds in darkness reliable information on plant operation. Hence, the people who are doing the misleading are the corporations and the government entities that regulate them. Thus, increasing militarization of our energy supply is a serious civil liberties concern.

Indeed, as reported by well-known climate scientist Joseph Romm [11], Duke Energy won't even reveal what the costs of its nuclear plant for the Carolinas will be for fear of spooking investors and the people who will ultimately have to pay for such high-priced energy: the taxpayers. In court, Duke has successfully argued that the cost of building the plant and supplying power from it is a "trade secret." Florida has passed a law that will force taxpayers to pay for energy from new nuclear plants years before they receive any in order to recoup the ever-escalating costs.

Even one of the leading nuclear trade magazines, Nuclear Engineering International, reported that [12]:

"According to Moody's, companies that build new nuclear plants will see marked increases in their business and operating risks because of the size and complexity of these projects, the extended time they take to build, and their uncertain final cost and cost recoveries..."

"At least in the USA, this is probably the weakest link: granted that the industry has to address potential skills shortages, decommissioning costs, long-term waste management concerns, supply chain constraints, licensing and regulatory uncertainties, amongst many other issues—but faced with a lower credit rating, there aren't many company boards that would give the go-ahead to a new nuclear plant."

So even putting aside safety concerns, the "weakest link" on economics and debt financing is in fact part of an entire chain of unresolved problems; this for an industry that has existed far longer and with far greater degree of public subsidies than genuine renewable energy technologies.

Even *Time magazine*, in an article entitled "The Real Costs of Nuclear Power," [13] has recognized the deranged basis of nuclear power, even if Democrats and Republicans haven't:

"Even before the earthquake-tsunami one-two punch, the endlessly hyped U.S. nuclear revival was stumbling, pummeled by skyrocketing costs, stagnant demand and skittish investors, not to mention the defeat of restrictions on carbon that could have mitigated nuclear energy's economic insanity."

"Obama has offered unprecedented aid to an industry that already enjoyed cradle-to-grave subsidies, and the anti-spending GOP has clamored for even more largesse. But Wall Street hates nukes as much as K Street loves them, which is why there's no new reactor construction to freeze. Once hailed as"too cheap to meter,"nuclear fission turns out to be an outlandishly expensive method of generating juice for our Xboxes."

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WITHOUT THE lies and the cover-ups—and the unbreakable connection to the imperial drive for military supremacy between competing nation states, which is inherent to capitalism—nuclear power would have been stillborn. Nuclear power is, in essence, an insolvent industry; it is kept on life support purely by means of massive government subsidies. Governments are committed to keeping it that way because of its connection to Great Power status and imperial geo-strategic power plays, not for any alleged environmental benefits or the supposedly unproven nature of renewable alternatives.

It is because of the costs and time involved in building new nuclear plants that nuclear operators are desperate to re-license old plants and keep them going for another 20 years, whatever the safety concerns attached to operating nuclear plants built in the 1970s. Decommissioning costs are prohibitive and require a multiyear plan for the dismantling of the power stations and their radioactive innards.

In the upside-down world we currently live in, the allegiance to profit once again trumps safety as the nuclear regulatory body, the NRC has approved every single application for extension, even in the teeth of mass opposition and a council vote, as was the case with the aging and perpetually leaking Vermont Yankee plant.

As a 2009 report by the Carnegie Institute for Peace explains [14]: "Without major changes in government policies and aggressive financial support, nuclear power is actually likely to account for a declining percentage of global electricity generation." As regards being an answer to climate change, the report goes on to argue:

"Nor is nuclear power going to make a big difference in reducing carbon emissions in the next two decades, when the biggest reductions will have the most impact. Nuclear power is certainly a cleaner alternative to coal-based electricity, but the need for dramatic and immediate reductions in carbon emissions suggests cheaper and quicker approaches that span all energy uses, not just electricity—namely, improved efficiency."

As the report continues, no new nuclear plant could come online in the U.S. until at least 2015; globally, that figure would be at least 2020. As old plants are forced to close, and new building pre-Fukushima only equates currently to an average of eight reactors a year, nuclear construction would have to increase to historically unprecedented levels of 30 to 45 reactors coming online every year after 2030 to make even a dent in global carbon emissions.

The report concludes, "In sum, the more urgent climate change requirements are, the less likely nuclear energy will be able to meet these challenges."

Another comprehensive report published in 2008 by Amory Lovins of the Rocky Mountain Institute similarly lays out why nuclear power is obsolete and unnecessary [15]:

"[N]uclear power is continuing its decades-long collapse in the global marketplace because it's grossly uncompetitive, unneeded, and obsolete—so hopelessly uneconomic that one needn't debate whether it's clean and safe; it weakens electric reliability and national security; and it worsens climate change compared with devoting the same money and time to more effective options."

Of course, the idea that nuclear power corporations, of all entities, would be concerned with global warming is laughable. Indeed, the largest nuclear generator in the U.S., Exelon, generates half its power from nuclear and the other half from coal, completely undermining the argument that staying with nuclear will prevent the expansion of coal. Looking at the growing energy needs of China and

India, they are pursuing the construction of new nuclear and coal plants simultaneously.

By weakening the anti-nuclear movement, what we'll get is both: more nuclear plants and more coal plants. This is because undermining the anti-nuclear movement undermines the other movements for a clean energy future, such as the fight to stop mountaintop removal of coal, the construction of new coal plants or the growing fight against the expansion of hydrofracking for natural gas. This is a point that has eluded Monbiot and other green activists arguing for the dismantling not of the nuclear plants themselves, but the global movement against them.

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AS THE old labor solidarity saying goes, an injury to one is an injury to all; conversely, a victory for one—against nuclear power—would represent a victory for all movements against the entrenched corporate energy interests.

What activists need to do is make stronger connections between these different movements and recognize that all of them are aimed at the same structure of political and economic power that relentlessly puts profit before people and planet. We have a common enemy; we need to make common cause—a point made most eloquently by Betsy Hartman in her article "Why Anti-Nuclear Belongs in All Our Movements." [16]

While several articles have dissected the coal vs. nuclear argument and the poverty of this supposed "choice," what has been missing is an analysis of how movements build and grow. Even as Monbiot rather hysterically accuses anti-nuclear activists of being blind to the dangers of coal power, I have yet to run into an anti-nuke activist who is indifferent to the polluting power of coal.

Monbiot and other pro-nuke greens get a hearing because we have lost some of the knowledge of previous fights against nuclear energy in the 1970s and 1980s, when there was a truly gigantic international movement against nuclear power and nuclear weapons, with immense marches and demonstrations.

This is our challenge: to rearm a new generation of activists with the knowledge needed to understand why nuclear power is not just dangerous and expensive but is also under no imaginable set of circumstances an answer to climate change. Fortunately, in light of Fukushima, we are seeing a revival of anti-nuclear struggle around the world.

In response to massive anti-nuclear protests, Germany has already done a U-turn on nuclear policy as Chancellor Angela Merkel was forced to shutter the seven oldest nuke plants in Germany, pending a review of their safety after tens of thousands demonstrated against nuclear power and formed a human chain nearly 30 miles long [17].

In the U.S., anti-nuke activists are seeing a revival of interest, too [18]. Here in New York City, the newly formed coalition Shut Down Indian Point Now! [19] has already held an inaugural meeting, organized two demonstrations and pulled together a teach-in on nuclear power that attracted 80 people.

Monbiot misunderstands the dynamics of movements against the status quo and how they are built. He poses the question in the same manner as Gen. Turgidson when speaking of Nuclear Armageddon in Dr. Strangelove:

"Mr. President, we are rapidly approaching a moment of truth both for ourselves as human beings and for the life of our nation. Now, truth is not always a pleasant thing. But it is necessary now to make a choice, to choose between two admittedly regrettable, but nevertheless ***distinguishable****,*

postwar environments: one where you got 20 million people killed, and the other where you got 150 million people killed."

The low expectations he sets for change take no account of how movements proceed through small victories, and that a successful mass movement in one area can inspire people on issues that are seemingly not directly connected or are geographically distinct from one another.

How else to explain how people in the Midwest in February 2011 were suddenly inspired to learn Arabic for their protest signs in Madison, Wis.? A victory in Egypt not only inspired them, but made them realize there was a connection between their struggle and that going on in North Africa. Furthermore, the lesson they drew was: If Egyptians could win, maybe we could, too.

Wittingly or not, Monbiot does a disservice to our movement by denigrating anti-nuclear activists, as if we are the ones responsible for accelerating climate change or irradiating the world. To echo a point made by Japanese anti-nuclear activists, the only positive outcome of the Fukushima disaster—which is far from over and could easily worsen—is if it leads to the beginning of the end for nuclear power.

If we can win that, then we can more easily fight to shut down the coal plants and begin a real conversation about a rational energy policy for the U.S. and the world. Not only that, but we will have freed up tens of billions of dollars with which to do so.

To quote the great Jimmy Cliff once more: "Give the people what they want: Equal rights and justice."

P.S.

* From Socialist Worker, May 4, 2011:
http://socialistworker.org/2011/05/04/should-greens-support-nukes

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Footnotes

[1] Why Nuclear Power Must Go ESSF (article 21370).

[2] See on ESSF (article 20898): Debate on the lessons of Fukushima and the costs of nuclear power

[3] http://www.guardian.co.uk/commentisfree/2011/apr/05/anti-nuclear-lobby-misled-world

[4] http://www.nap.edu/openbook.php?record_id=11340&page=1

[5] http://mrzine.monthlyreview.org/2011/gronlund070411.html

[6] http://yubanet.com/usa/Internal-NRC-docs-show-doubts-about-US-nuke-safety_printer.php

[7] http://mrzine.monthlyreview.org/2011/lyman060411.html

[8] Japan’s Nuclear Nightmare Triggers Fears in France, ESSF article 21443.

[9] http://business.timesonline.co.uk/tol/business/industry_sectors/utilities/article6626811.ece

[10] Japan and Fukushima: Culture of Complicity Tied to Stricken Nuclear Plant, ESSF article 21444.

[11] http://www.greenchange.org/article.php?id=2725

[12] http://www.neimagazine.com/story.asp?storyCode=2047917

[13] http://www.time.com/time/nation/article/0,8599,2059453,00.html

[14] http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=22749

[15] http://www.rmi.org/rmi/Library/E08-01_NuclearIllusion

[16] http://www.commondreams.org/view/2011/04/12-10

[17] http://www.bbc.co.uk/news/world-europe-12724981

[18] http://articles.chicagotribune.com/2011-04-11/business/ct-biz-0411-anti-nuke-20110411_1_anti-nuke-nuclear-power-paul-gunter

[19] http://www.facebook.com/ShutDownIndianPointNow