

20 MILLION WINDMILLS

THE FUTURE OF POWER?

Is wind power the future of electricity? New estimates suggest this is highly unlikely. Will this long-winded argument between nuclear and wind finally conclude?

Earlier this year, Sir Fred Hoyle calculated that a whopping 20 million windmills would be needed to electrify Great Britain. They may have provided a solution to energy production, but can these windmill fanatics provide a solution to the resulting housing crisis that would follow? It appears the nation will be occupied not by its people, but by the windmills! Surely they cannot expect the population to give up their gardens (nor their peace and quiet) for an unsightly view and “appalling roar”, as Sir Fred Hoyle describes.

On account of the many campaigns made by the wind energy lobbyists, it is likely that the reader is familiar with the alleged evils of nuclear power. However, I am here to put these claims to rest. Lord Rothschild himself has stated that nuclear would only cause an estimate of 2.5-15 deaths, while the risk of death from wind power jumps to a staggering 230-700 people. Now, the reader may be pondering (and rightly so) the issue of radiation leaks. Fear not! Lord Rothschild has also made it known that

the frequency of “death from escape of radioactive substances within a 25 mile radius” is less than 1 in 1,000,000 per year.

Of course, no source of energy could ever be truly safe, but the argument is wholly exaggerated, and diverts the concerned reader from the simple truth. Assuming the nuclear reactor is well constructed, with particular consideration to the (innumerable) emergency procedures, there is no reason to believe that a nuclear power station could pose as catastrophic a risk as the anti-nuclear protestors like to declare. In fact, Adrian Berry goes so far as to say that the nuclear plants have so many back-up systems, that it is a “far safer system than any other”.

It is undoubtedly clear that the future is nuclear. There is no room for windmills in the United Kingdom, and there is no room for windmills in the future. Alas, it will be, as with everything important, the UK taxpayer’s loss if the wrong decisions are made.

By Megan Phillips, 24 November 2023

NUCLEAR: “A TOTAL WASTE OF PUBLIC MONEY”

HAS WIND ENERGY BEEN OVERLOOKED?

Shocking new information has been released on wind energy production today, suggesting that previous statistics were highly underestimating the efficiency of wind.

In an exclusive interview with Peter Musgrove, ex-engineer and wind energy advocate for the last fifty years, our reporters discovered that he has been deliberately devaluing the efficiency of wind power as a source of the UK's energy since making the predictions in the 1970s. “I could see that the resource was more than sufficient to give not 20%, but 50% of our electricity,” Musgrove reveals. “What little credibility I've got at that time would be shot to pieces if I start saying 50%. So I toned it back from what I believed, to what I thought would be a bit more credible, which is 20%.”

When asked why he believed he needed to sound more credible, Musgrove held the nuclear lobbyists accountable. The politics behind nuclear power has always been an important background factor, Musgrove proclaims, and one of the reasons the nuclear industry has always had access to the government is because of the link to the weapons side. “They want to make sure that there's a pool of nuclear expertise, so that we can continue to have a nuclear capability.”

Musgrove spent many years counteracting the misinformation spread against wind energy, and is very familiar with the arguments made in favour of nuclear power. Nuclear has generally been considered the future of energy since the 1970s. But is nuclear power really the way forward? Peter Musgrove disagrees.

The arguments spread by nuclear lobbyists have been weakened simply by the evidence presented against them. “Offshore wind can deliver electricity at a price substantially lower than nuclear,” Musgrove argues, claiming that it could cost less than half of what nuclear energy costs to produce. A common argument against wind power is that no

energy is produced when there is no wind. But running nuclear power full time, he counters, has its own problems.

Musgrove presents a scenario where the UK moves solely to nuclear power. The only way they are able to keep the costs of energy at their current prices is by running the power stations non-stop, and this creates a massive problem when the demand for electricity is much lower in summer than in winter. “If you start turning nuclear power stations off when the demand is low, you add massively to the cost,” he argues. “The process of shutting down a nuclear power station is not a straightforward one... and it takes hours, if not days. So nuclear is not the answer.”

When our reporters asked about his thoughts on the current situation, Musgrove gave mixed emotions, suggesting that far more progress could have been made towards renewable energy over the last fifty years, had there not been missteps. Politics appears to be the main cause for this lack of advancement. “The number of bad decisions made by politicians and by senior civil servants,” he states, was because “very few of them really understand numbers. And when it comes to making decisions as to how you allocate resources between different options, the numbers matter.” His belief in the potential for wind energy production is never so clear than in his declaration: “the present government's push for nuclear is a total waste of public money.”

Nevertheless, Musgrove's stance is not completely negative. While he does contend that “nuclear is one of the worst options,” he praises the fact that the UK has made progress towards wind energy, despite the drawbacks. “We are particularly blessed as a country by having such a large area of water,” he concludes, “and so, the fact that we're getting 20% plus is something that I'm very pleased about.”

By Megan Phillips, 24 November 2023

November 23 1980

WHEN DID WIND-POWER START COOKING OUR CHRISTMAS LUNCHES?

A farmer from the Orkneys will cook Christmas dinner for his family from the electricity generated by the first windmill set up by a State electricity board.

The grand 22-Kilowatt windmill, standing at 40 feet high, complete with 15 foot blades, will provide electricity for not only Mr Marcus Wood's kitchen, but the entirety of his 630 acre-farm located on South Ronaldsay Island in the Orkneys. This feat is the product of a new economic initiative to save on diesel fuel.

There has been a recent interest in the Orkneys as a potential site place windmills and make the most of our windy disposition. Encouraged by the fact that the Orkneys is one of the windiest places in Britain, the Hydro Electric board paid £25,000 for the windmill to provide power commercially. The mill can operate at a minimum wind speed of 12mph.

What does this mean for Mr Wood and for others?

His electricity meter will be read in the normal way and he will be charged the normal rate. To understand the economy of this proposition, its estimated that Mr Wood's electricity bills will be about £400 a quarter!

Mr Wood's windmill could be a more reasonable alternative to the diesel fuel that is normally uses to generate electricity his. The

Board believes that if this experiment proves successful, it promises a way of supplying power to remote communities. Although some islands get their power by cable from the mainland, most depend on local power stations fuelled by expensive diesel oil.

It is hoped that, if the scheme proves successful, local communities or farmers (who would get farm

investment grants) might buy windmills for themselves and install them. This would be backed and advised from the board.

Despite how the Wood's family will be provided with their lunch by what seems like a Christmas miracle, I doubt that this initiative will be applicable on a larger scale. Regardless of the possibility of wind-power to light up the homes and power the kettles of many remote communities, there is little chance of producing a meaningful amount of electricity on a national scale. Millions of machines would be needed to make any reasonable amount. Also, how would they be of any use on windless days! Although the Woods's case proves splendid for remote communities, I disbelieve any proposition of wind-power stepping up to generating any portion of electricity for Britain. I bet my Christmas lunch on it!

By Katie Dawson, 24 November 2023

EXPLOSIVE AND LONG-WINDED DEBATE OVER THE RISKS OF WIND-POWER VS NUCLEAR

A reflection over Lord Rothchild's claim that risk of death associated with wind-power energy is much greater than the risk of death from nuclear energy systems.

"Really? Nuclear power safer than windmills?" is what Peter Musgrove, engineer from the University of Reading, must be saying towards Lord Rothschild's comments made in his Richard Dimbleby Lecture on BBC 1. Rothchild's fascinating points of view were copied up and published in a very perplexing article titled "Nuclear Power: safer than windmills." Rothchild's bold ideas and witty remarks were enough to render anyone baffled, which is indeed what happened to Peter Musgrove. In response to this article, Musgrove wrote a letter to the Times in order to straighten out the misleading and ultimately very incorrect opinion of Lord Rothchild.

The main argument in Rothchild's article is that the risk of death associated with harnessing wind energy is much greater than the risk of death from nuclear energy systems. This conclusion he reaches is even more confusing when he then admits that this it "run counter to our intuition." He highlights the fact that we foolishly forget to factor in not just the risk of "being hit by the blade of a windmill," but that we also forget to factor in the process of getting and fabricating the materials with which the windmill produces that energy. However, this is when Musgrove points out that this conclusion is based on incorrect information. This aforementioned information is from Dr. Inhaber's (from the Canadian Atomic Energy Control Board), and his assumption that windmills require 1000 tonnes of materials per megawatt-year output. In his letter Musgrove argues that this figure is an enormous mistake as designs for the multi-megawatt windmills produced in the U.S.A and U.K indicate that materials will require only 10 tonnes per megawatt-year output. These two figures are comically very far apart. Consequently, Musgrove points out that this overestimation of material requirements has increased the Rothchild calculated

risk of windmills "by a factor of about 100." "Correcting this enormous error completely invalidates his argument that nuclear power is much safer than any of the renewable energy sources" is what Musgrove writes in his letter, arguably sounding very convincing. I guess we will see when the planned first multi-megawatt windmill installation takes place in the U.S early next year.

Non-renewables in an eco-friendly future

It is not just windmills' corner that Musgrove has to defend, but also renewable energy. The latter part of the article demonstrates Rothchild's reflection for the future and what it means for the environment. His stance as overtly pro-nuclear would according to "intuition", assume that he does not have much regard for the environment. This is proved wrong when he states that "I am not against the preservation of the environment," graciously supported by the explanation that he has an eco-conscious background because his Father was the Minister of Agriculture and in his will, ordered the destruction of maps which showed where rare butterflies could be found. Even more eco conscious, he exclaims that he doesn't know why such little effort is being made to put some of the wasted trillions of cubic feet of natural gases to use. Especially considering as daily we are being hammered by "maniacal" environmentalists by the fact that our non-renewable sources are running out really quickly. But do not worry, as Rothchild has a solution to the problem of all of this toxic waste, which is to "sail away and find an uninhabited island...get cracking there and don't tell the econuts where you have gone." Charming. Musgrove states that the energy independence that we have enjoyed so far will be a thing of the past. So we need all the energy alternatives that are technically and economically feasible. Musgrove soberly states that we need to include both nuclear energy and wind energy in the future, with "a mix that will depend on their respective economic, safety and availability."

THE MILLS ARCHIVE TRUST

The debate of these two figures in their respectable field reveals important points of discussion when it comes to the future of Britain and its energy powering tactics. Rothchild's article is a laugh a minute, and regrettably, not in the way in which I believe he intended it to. I am not sure of the article is supposed to be as outlandish, perplexing and ironic as it reads...however it reads as exactly that. Just as Rothchild closes his article "where be bold: but not too bold" – particularly when making or walking near, a windmill," Musgrove's points out that perhaps the quote "seems rather more relevant to nuclear energy than to wind energy."

By Katie Dawson 24 November 2023