
From: Ingela Richardson [mailto:mwmarho@iafrica.com]
Sent: 24 June 2009 06:12 PM
To: Themba Skonje
Subject: No to nuclear reactor at Thyspunt

Dear Sir/Madam

RE: NO TO NUCLEAR REACTOR AT THYSPUNT

Nuclear waste and used fuel is highly radioactive. There is no way to "dispose" of it. It is stored on site at Koeberg or buried underground at Vaalputs. It remains toxic to all life for thousands of years.

Nuclear energy is well known as the most expensive form of energy on the planet. The people of South Africa are being asked to pay ever higher electricity bills to cover nuclear expansion. As economists pointed out years ago, it is simply not possible for South Africans to pay these overwhelming bills. Increases in costs of electricity mean increases in costs of food production. South Africans who are already unemployed and starving will not be able to survive.

Who wants to live next to a nuclear reactor? This will negatively impact property values and negatively impact farmers who will not be able to market produce as organic - nor will the tourism industry be able to promote its beaches as pristine when a massive nuclear reactor with a cooling tunnel that reaches far into the ocean - devastates marine life.

South Africans have also not been told how the government plans to transport nuclear fuel from Pelindaba in Pretoria to these nuclear reactors or transport the waste. In many countries around the world, there have been accidents and spills with this kind of waste. Due to the nature of nuclear materials, "accidents" affect an entire city. South Africa's health and emergency services would not be able to cope with this.

Uranium mining waste and nuclear waste has damaged fisheries, agriculture, tourism and people's health around the world. Uranium miners in the US got cancers at a much higher rate than anyone else. And in Canada, primary cancers are listed as an "occupational hazard" of uranium mining.

Alternative energy sources that are cheaper, healthier and easier to put into use – include solar, thermal, wind, ocean and water power.

The attached Eskom report showing corridors for transmission lines show how large an area will be affected. The attached Burnie paper on French reprocessing shows that there is no such thing as "recycling" nuclear materials.

Yours faithfully

INGELA RICHARDSON

Who says nuclear power is clean?

Magnus Linklater

http://www.timesonline.co.uk/tol/comment/columnists/magnus_linklater/article593023.ece

Three massive claims are being made for Britain building a new generation of nuclear stations: first, it is the only way that Britain can meet its ambitious targets for reducing carbon emissions; secondly, it is the only reliable option available if we are to fill the "energy gap" left by declining sources of fossil fuels; thirdly, it is the best way of ensuring that our energy comes from "secure" sources, rather than unstable oil-rich oligarchies.

These claims are at best specious, at worst untrue. Take carbon emission. There is a blithe notion that nuclear power is "clean" — it emits no CO² and therefore does not contribute to global warming.

This argument has been systematically taken apart over the past five years by two independent experts, Jan Willem Storm van Leeuwen and Philip Bartlett Smith, one a chemist and energy specialist, the other a nuclear physicist, who between them have a lifetime's experience in the nuclear industry. What they have done is look at the entire life cycle of a nuclear power station, from the mining of the uranium to the storage of the resulting nuclear waste. Their conclusions make grim reading for any nuclear advocate.

They say that at the present rate of use, worldwide supplies of rich uranium ore will soon become exhausted, perhaps within the next decade. Nuclear power stations of the future will have to rely on second-grade ore, which requires huge amounts of conventional energy to refine it. For each tonne of poor-quality uranium, some 5,000 tonnes of granite that contains it will have to be mined, milled and then disposed of. This could rise to 10,000 tonnes if the quality deteriorates further. At some point, and it could happen soon, the nuclear industry will be emitting as much carbon dioxide from mining and treating its ore as it saves from the "clean" power it produces thanks to nuclear fission.

At this stage, according to an article in Prospect magazine by the energy writer David Fleming, "nuclear power production would go into energy deficit. It would be putting more energy into the process than it could extract from it. Its contribution to meeting the world's energy needs would become negative." The so-called "reliability" of nuclear power, which its proponents enthuse over, would therefore rest on the growing use of fossil fuels rather than their replacement.

Worse, the number of nuclear plants needed to meet the world's needs would be colossal. At present, about 440 nuclear reactors supply about 2 per cent of demand. The Massachusetts Institute of Technology calculates that 1,000 more would be needed to raise this even to 10 per cent of need. At this point, the search for new sources of ore would become critical.

These arguments have to be met before other, more searching questions are answered about where we intend to store waste, what we are going to do to prevent radioactive leaks, and how we should protect nuclear plants against terrorism.

The truth is that this form of energy is, in the end, no more safe, reliable or clean than the others. A wind turbine, unlike a nuclear reactor, can be removed once it has come to the end of its natural life. A wave machine can simply be towed away.

Nuclear is not trouble-free, and the more you look at it, the more enticing the other choices become.

FROM THE PELINDABA WORKING GROUP

NNR CAN'T COPE WITH NUCLEAR IN SA

The Parliamentary Monitoring Group last night released the minutes of the 21 November briefing by the NNR to the Minerals & Energy Portfolio Committee.

The NNR is admitting it is completely understaffed and overwhelmed by the prospect of handling the government's proposed nuclear energy plan and unsure who or where to source expertise. Already understaffed and ill-qualified, they cannot hold onto staff, find new staff and are being forced to grapple with filling staff quotas of disabled or female personnel.

The NNR has come under great scrutiny for many years for its allegiance to the nuclear industry, falling as it does under Minerals and Energy and not Environmental Affairs. More recently because of its inept and denialist handling of the far-reaching radioactive pollution of the West Rand's water supplies from 120 years of mining despite repeated warnings over decades. (Already genetically deformed children are being found there and toxicity of the water supply is now spreading throughout the Cradle World Heritage Site). Even this massive disaster is being minimised in the report which goes on to list some of the other problems the NNR faces.

1. The NNR describes how it suspended the licensing process in 2006 of the PBMR after discovering improprieties in the ESKOM and the PBMR Company "in respect of Manufacturing of Components Important to Safety by PBMR".
2. Although this report indicates the NNR is still waiting for the safety report of the intended nuclear fuel plant at Pelindaba, Necsa is on record as admitting it has begun "experimenting" and manufacturing these nuclear pebbles destined for the PBMR (which license has also been suspended).
3. How it had worked with Necsa for sometime now to address security issues of concern (i.e. despite their concerted efforts there was a massive breach of security at Pelindaba where a specific computer and the ops room control panel were targeted). Obviously they failed. Necsa's briefing to Parliament went a long way also to discuss how it was dealing with security issues and also went on to mention it does not have sufficient funding for maintenance.
4. 53 "contaminated sites" are mentioned in the report but there exists no details and certainly no public knowledge of these.
5. The NNR is "discontinuing" the proposed rehabilitation of four sites in the Karoo left "contaminated ...with radiological hazard to members of public and to future generations" since the late 1970s and early 1980s because the DME has issued uranium prospecting permits to new companies.
6. They only now declared for the first time research they're doing into nuclear insurances and third party liabilities – these barely exist currently.
7. Several mines have been closed for nuking workers and not compliance (their figures are shameful in that while they claim a reduction of nuked worker figures, they fail to mention that the years during which they show a decline, uranium mining had virtually stopped).

8. The impounding of a uranium carrying ship that docked without authorisation in Durban
9. Alarming statistics of radioactive waste piling up at Pelindaba & Koeberg (where it is also being poured into the Atlantic Ocean. Similar details are conspicuously missing from their report on Pelindaba where Necsa is known to pour radioactive waste into the Crocodile River).
10. Inadequate compliance with maintenance procedures and “operating technical specifications” at Koeberg.
11. Incompetency and “sufficiency” of Eskom’s workforce to work safely.
12. Nuclear “incidents & accidents” are not detailed and reported as “satisfactory”.
13. Mention is made of “suspected loss of a small quantity” of Highly Enriched Uranium at a building at Pelindaba where activities were suspended and a reactor was forced to shut down “until conditions for return to power were met”.

How can anyone justify a nuclear and uranium mining future in this country under these circumstances?

This committee meeting is available at:

[National Nuclear Regulator Annual Report 2006/07: briefing](#) 21 Nov 2007

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