

# Reply to Uranium Articles

Two articles and two cartoons in the "Magazine" pointing out why uranium should be mined and exported have brought a response from a number of sources.

In an article headed "Nuclear Power and Ethics" Brian Martin states;

The debate over whether Australia should or should not export its uranium and help promote a world more dependent on nuclear power has been carried out primarily on two levels.

The proponents of uranium mining and nuclear power largely argue in terms of economic benefits, the opponents largely argue in terms of environmental costs.

But the choice is also, and perhaps even primarily, one of ethics.

Value-laden questions — like who will benefit and who will lose, what the nature of the benefits and losses is, and what social options are opened or closed by a particular action or choice — must be answered.

The object here is to highlight very briefly some features of the ethical dimension in the uranium mining/nuclear power debate.

**The cultural factor: uranium mining and the Aborigines**

In the light of past experience, uranium mining in Australia will have a major and adverse impact on Aboriginal culture.

It is worth describing this impact in more detail before spelling out its moral implications.

Traditional Aboriginal culture is based on a close relationship between the Aboriginal people and the land on which they live and draw their sustenance. The relationship of Aborigines to their land is one of depth, warmth, and of overwhelming significance.

Traditional Aboriginal culture is extremely fragile in the face of the more technically advanced Western culture; and mining companies unfortunately are not the most sensitive representatives of their culture.

Mining or settlement disrupts the Aboriginal culture in several ways.

It physically defaces or destroys the natural surroundings which the Aborigines hold sacred.

It promises material wealth and tempts away the younger aborigines, destroying the traditional lines of authority.

And because of the exploitation of their unskilled labour and because of discrimination, White culture introduces the Aborigines to alcoholism, prostitution, and crime — which are virtually unknown in traditional Aboriginal culture.

The experiences of the past speak clearly: when mining impinges on Aboriginal culture, it virtually destroys it, and replaces it with the worst aspects of White culture.

What gives a person (or a mining company) the right to take over land traditionally used by the Aborigines, and thereby destroy their culture?

Aborigines do not use nuclear electricity, and indeed in their traditional life-style do not use electricity at all.

So any benefits arising from uranium mining will not accrue to them. (Because their land and their culture are of primary importance to Aborigines, no amount of money can compensate them for destruction of these aspects of their lives).

So any benefits must be weighed against a resulting reduction in equality and justice.

Ever since the Whites arrived in Australia, the interests of the Aborigines have been sacrificed for those of the whites.

A choice for uranium mining should reflect a considered judgement that the further interests of Whites and their culture are more important than maintaining what is left of Aboriginal culture.

(Admittedly, Aboriginal culture is being destroyed anyway, as by other mining operations. But this is not an ethical reason for uranium mining.)

**The environmental factor: small probabilities, big penalties.**

**The dangers of most sources of energy are relatively easy to determine.**

In producing energy from coal, the human costs in miners' lives, the environmental costs of strip mining, and the increase in cancer due to particulates in the air can be calculated with some degree of accuracy. It is also important to note that most of these effects are fairly direct: they happen roughly when and where the coal is used.

The major environmental dangers of nuclear power are different. There are at least two major sources of danger. First is the possibility of an accident in a nuclear power station. Typically this might involve the meltdown of the hot radioactive core and the release of large amounts of radioactive materials into the nearby area. The probability of such a major accident is very small because nuclear scientists and engineers do everything they can to prevent any such accident. But the probability remains, because no technology can completely eliminate human error or human malevolence, as a number of near-major accidents in the past have demonstrated.

The exact size of the probability of a major accident is a matter of debate.

In a word fully committed to nuclear power, it might range from one every 10,000,000 years (according to proponents of nuclear power) to one every 10 years (according to opponents).

What is not a matter of debate is that such an accident would be a major human catastrophe, quite conceivably resulting in tens of thousands dead, untold property damage, and genetic defects for many generations due to the radioactivity released.

The question is, then, is it worth taking such a risk, or would it be better to depend on sources of energy which offer no possibility of a major catastrophe?

A second major danger involved with dependence on nuclear power is long-lived radioactive wastes.

Such wastes are produced whenever nuclear power is produced.

Once again, nuclear scientists and engineers have made every attempt to find a way to make sure these wastes never get into the environment where they can affect people.

(So far no satisfactory solution has been found).

The trouble is that once the wastes get into the environment, they cannot be removed, and continue to affect, for thousands of years, the health of anyone exposed.

Most deadly is pollution, hundreds of kilograms of which are produced in any nuclear power plant each year.

Plutonium remains radioactive for hundreds of thousands of years; and even a tiny speck breathed in the lungs can cause cancer.

It may be that plutonium and other long-lived wastes can be completely isolated for the necessary millennia.

The question is whether it is worth taking the risk that they won't be — due to accident,

sabotage, war, tidal wave, earthquake, or geological change.

The question is complicated by the fact that if the wastes do escape, it will be future generations — far into the future — that pay the penalty.

Are we justified in choosing the nuclear option when it is we will reap any benefits, while future generations will have no choice but to be exposed to the risks?

**The political factor: terrorism and nuclear power:**

With thousands of nuclear reactors and thousands of daily shipments of nuclear materials, there will be ample opportunities for nuclear theft and blackmail.

Terrorists might conceivably make nuclear weapons out of stolen materials, it would be easier merely to threaten to release plutonium waste over a populated area unless their demands were met — or to do it as a method of reprisal. Another possibility is the use of nuclear reactors as objects for attack; for example, already aircraft hijackers have threatened to fly into a nuclear reactor.

Nuclear power also has political ramifications in its contribution to the spread of nuclear weapons capability. (This is the possibility most feared by the Ranger Inquiry commissioners).

In spite of the most stringent safeguards, nuclear reactors can be used by countries to produce material for nuclear weapons.

India's 1974 nuclear explosion was based on plutonium obtained from a Canadian nuclear reactor. (Incidentally, Canada has had some of the most stringent regulations on export and use of its nuclear technology).

Because of its terrible human and environmental effects and because of its link with nuclear weapons, nuclear power lends itself to use by terrorists and to proliferation of nuclear weapons capability.

Is it right to use a technology for producing energy that lends itself to such uses?

Next week: The Social Factor:



"Now all promise to be good boys and only use it for powering lawnmowers, egg-beaters, toothbrushes . . .!"



\* Constable Allan Snow, of the Naval Police, puts his dog Barney through his paces during the open air day at H.M.A.S. Albatross, Nowra N.S.W.